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Manufacturing Investment Statistics

Capital Appropriations

Third Quarter 1985

and

Capital Investment and Supply Conditions

October 1985

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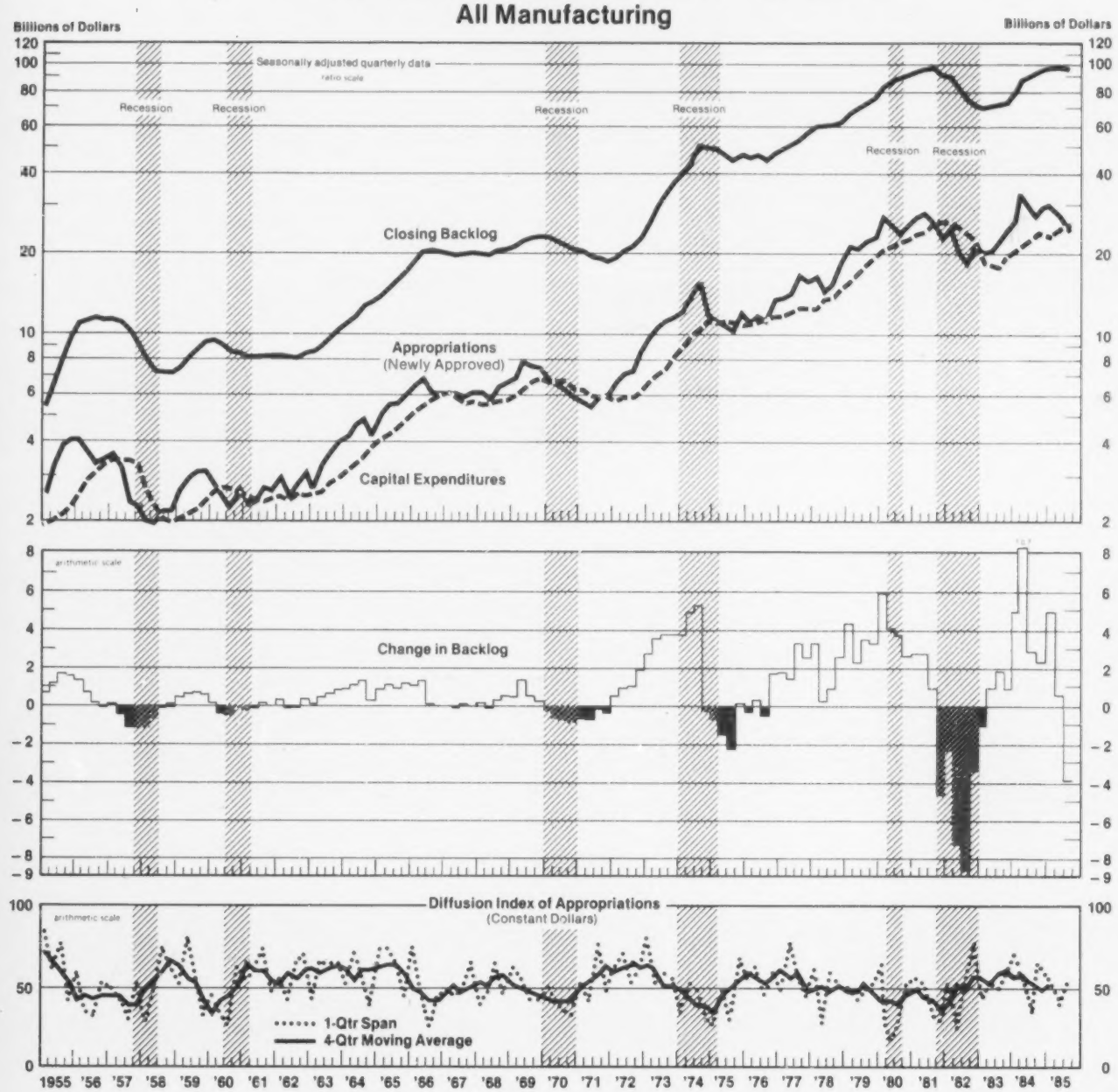
The Conference Board
70th Anniversary

CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION

All Manufacturing



Surveys conducted by
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Highlights of the Third Quarter Capital Apppropriations Survey

- Appropriations Decline for Second Consecutive Quarter
- But Capital Spending Continues to Grow
- The Closing Backlog of Unspent Appropriations Declines
- Capital Spending Expected to Increase by 5% in 1986

Summary

The 1,000 largest U.S. manufacturers appropriated fewer funds for spending on plant and equipment in the third quarter. This—the second consecutive quarterly decline—leaves appropriations for the first three quarters of 1985 7 percent below the same period in 1984. But because appropriations were so high in 1984, capital spending by the nation's large manufacturers continues to increase. As a result, the level of expenditures has now moved above the level of new appropriations, reducing the backlog of unspent appropriations. This suggests a leveling off, or even a decline, in capital spending by large manufacturers during the fourth quarter of 1985 or in early 1986.

But any slowdown in capital spending is likely to be fairly short-lived. Survey respondents expect their appropriations for new plant and equipment to turn up again during 1986. The increase in appropriations is expected, in turn, to lead to a rise in actual spending of approximately 5 percent in 1986.

During the current economic expansion, U.S. manufacturers have, to a relatively large extent, focused their capital spending on increasing efficiency rather than expanding productive capacity. This is confirmed by responses to the Conference Board's latest survey. Under one-half of the companies are now planning to expand their capital facilities, indicating that further gains in efficiency will continue to be a primary motivation for manufacturers' capital spending in 1986.

Third Quarter Capital Appropriations Down

Appropriations for future spending on plant and equipment by the nation's 1,000 largest manufacturers fell again in the third quarter. Appropriations totaled $24.4 billion, down 11 percent from the second quarter. For the first three quarters of 1985, appropriations ran 7 percent below the first three quarters in 1984.

Most of 1985's decline can be attributed to the motor vehicle industry, where appropriations are 27 percent below the first three quarters of 1984. After tremendous appropriations growth during 1984, U.S. auto manufacturers are cutting into their large backlog and their new appropriations have declined.

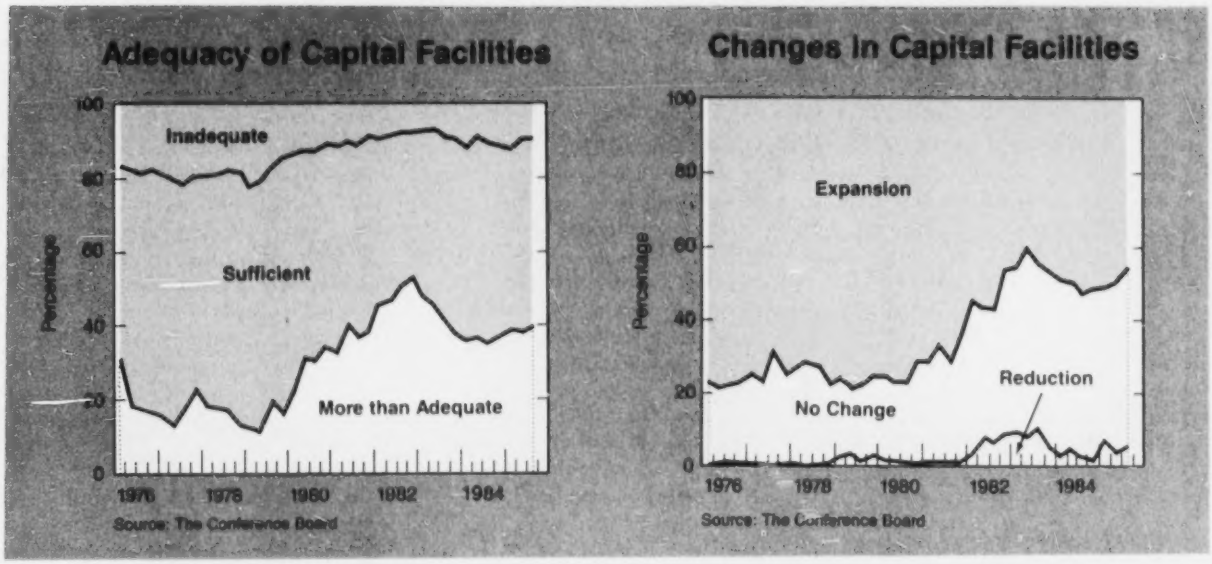
Excluding the motor vehicle industry, appropriations have shown no decisive trend in 1985. Quarterly movements have varied a great deal among manufacturing industries (see Table 2). Taking the first three quarters of 1985 as a whole, *declines* in appropriations by the electrical machinery, instruments, textiles, paper and petroleum industries have been slightly greater than *increases* in the aerospace, nonelectrical machinery, fabricated metals, stone, clay, & glass, rubber, and food & beverage industries.

Expenditures Continue to Grow, But at a Slower Pace

Reflecting the high level of appropriations for new plant and machinery during 1984 and early 1985, capital spending by the 1,000 largest U.S. manufacturers has continued to grow in 1985. Third-quarter expenditures totaled $26.0 billion, up 4.2 percent from the second quarter. During the first three quarters of 1985, expenditures are 14 percent above the same period in 1984.

Much of the third-quarter growth in spending was accounted for by the motor vehicle industry, where capital expenditures were up 32.9 percent from the second quarter. Excluding motor vehicles, expenditures were up only 1.3 percent, with 8 industries reporting increases and 8 reporting declines (see Table 2).

Removing the auto industry from the "all manufacturing" totals moderates, but does not fundamentally change, the investment picture of 1985. New appropriations are down, but not as sharply; and spending is up, but to a lesser extent.



Modest Spending Gains Expected in 1986

Survey data suggest the following scenario for 1986: A very slow or even negative rate of growth of capital spending early in the year (resulting from the current decline in the backlog of unspent appropriations) followed by a pickup later in 1986 due to renewed appropriations' growth. Survey respondents expect their capital appropriations in 1986 to approach 1984's $116 billion level. Capital expenditures are expected to total approximately $105 billion in 1986, up 5 percent from this year.

Some economic indicators would support such a scenario. The decline during 1985 in interest rates and the trade-weighted value of the dollar should help U.S. manufacturers improve both sales volumes and profit margins in 1986, both positive signs for the investment outlook. The recent strong market for U.S. equities, with its positive effects on the cost of capital, is also a plus.

But, on the other hand, many U.S. manufacturing industries have little need for increases in productive capacity. According to Federal Reserve data, operating rates of U.S. manufacturers averaged approximately 80.4 percent during 1985. This rate of capacity utilization is low when compared with the other economic expansions of the past 30 years. There have been four such expansions that lasted at least 36 months. Capacity utilization averaged 84.7 percent during the third year of those four earlier expansions.* But the utilization of capital facilities has been fairly stable in 1985, not declining (see charts above). And the negative effect of low operating rates on future investment may be diminishing because a relatively large share of recent capital spending has been aimed at improving productivity, not expanding capacity.

Investment Aimed at Efficiency Gains

During the past three years, a relatively large share of manufacturers' investment has been for efficiency gains and cost reduction, rather than increases in productive capacity. The proportion of survey respondents that expanded their capital facilities has remained relatively low, despite strong capital spending (see charts above). After beginning a modest increase in the Fall of 1983, the share of respondents planning an expansion of capacity peaked in early 1985 and has declined to less than one-half in the most recent survey (see Table 5).

The shifting emphasis of investment spending can also be seen by comparing Commerce Department data on real plant and equipment spending and Federal Reserve Board data on manufacturing capacity. In the current expansionary phase, capital spending by U.S. manufacturers has increased at a rate significantly

*Average of the industrial production cycles that began in Q3/1954, Q1/1961, Q4/1970, and Q2/1975.

above that of prior expansions during the last 30 years—but additions to capacity have been *below* average during this investment cycle (see chart page 3).

Productivity Rebounds

The large share of investment targeted on efficiency gains has contributed to a recovery in the rate of growth of productivity. Output per hour in the manufacturing sector has increased 10.9 percent since the recession trough, well above the 8.5 percent gain recorded during the first eleven quarters of the late-1970's expansion. As a result, even though manufactuirng production is now about 15 percent above that of 1979, this higher level of output is being accomplished with 2 million fewer production workers. All the investment aimed at increasing efficiency appears to be yielding some fruit.

Conclusion

The modestly upbeat investment expectations of our survey respondents suggest that the productivity gains obtained so far have been sufficient to warrant further increases in investment for modernization and cost cutting. But in many manufacturing industries, the need for more productive capacity does not seem very great.

Douglas Cliggott

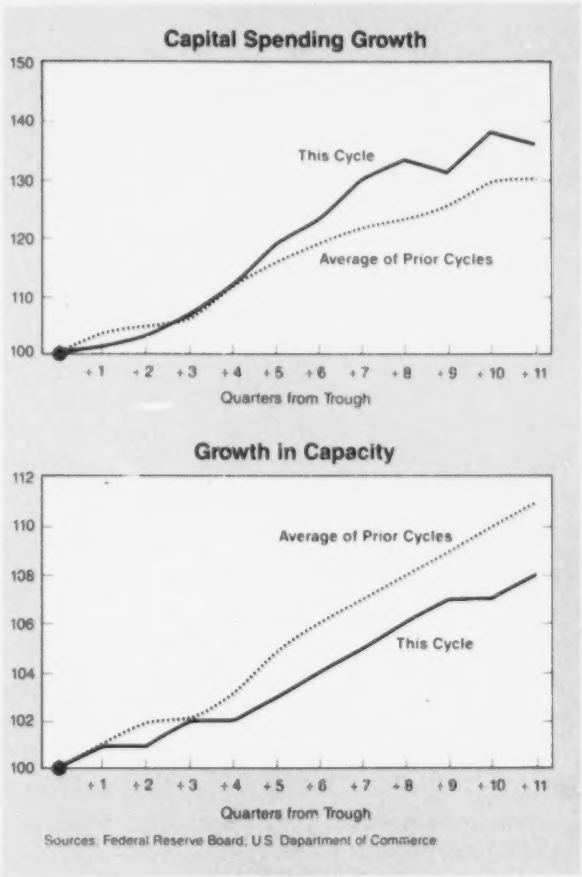


TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	IV-84	I-85	II-85r	III-85p	IV-84	I-85	II-85r	III-85p
ALL MANUFACTURING								
Opening backlog	92,065	94,367	99,351	99,880	83,262	84,416	86,935	87,215
Newly approved	29,100	29,938	27,560	24,411	14,367	15,084	13,767	11,817
Canceled	2,211	1,600	2,120	2,438	1,098	811	1,063	1,210
Capital expenditure	24,587	23,354	24,911	25,968	12,115	11,754	12,424	12,638
Closing backlog	94,367	99,351	99,880	95,885	84,416	86,935	87,215	85,185
DURABLE GOODS								
Opening backlog	42,514	44,311	48,465	45,950	39,314	40,197	42,320	41,068
Newly approved	15,072	16,737	10,910	12,782	7,409	8,510	5,427	6,128
Canceled	1,052	935	611	1,008	523	475	306	492
Capital expenditure	12,223	11,648	12,814	13,335	6,003	5,912	6,374	6,433
Closing backlog	44,311	48,465	45,950	44,389	40,197	42,320	41,068	40,270
Primary iron & steel								
Opening backlog	1,986	2,073	1,980	1,783	4,346	4,392	4,342	4,239
Newly approved	668	468	662	441	347	251	345	225
Canceled	51	26	78	284	26	14	41	145
Capital expenditure	530	535	781	458	275	287	407	234
Closing backlog	2,073	1,980	1,783	1,482	4,392	4,342	4,239	4,085
Primary nonferrous metals								
Opening backlog	3,003	2,526	2,538	2,374	3,363	3,123	3,129	3,047
Newly approved	263	291	170	335	133	150	84	166
Canceled	359	−38	23	7	181	−20	11	3
Capital expenditure	381	317	311	363	192	164	155	179
Closing backlog	2,526	2,538	2,374	2,339	3,123	3,129	3,047	3,031
Electrical machinery & equipment								
Opening backlog	6,104	6,713	6,111	5,653	5,201	5,503	5,198	4,976
Newly approved	3,760	1,724	2,327	3,001	1,863	874	1,130	1,440
Canceled	298	82	87	252	148	42	42	121
Capital expenditure	2,853	2,244	2,698	3,075	1,413	1,137	1,310	1,476
Closing backlog	6,713	6,111	5,653	5,327	5,503	5,198	4,976	4,819
Nonelectrical machinery								
Opening backlog	6,245	7,103	8,152	7,754	5,840	6,261	6,791	6,592
Newly approved	3,246	4,026	2,423	2,532	1,593	2,034	1,216	1,179
Canceled	−23	411	−20	199	−11	208	−10	93
Capital expenditure	2,411	2,566	2,841	2,444	1,183	1,296	1,425	1,138
Closing backlog	7,103	8,152	7,754	7,643	6,261	6,791	6,592	6,540
Motor vehicles & equipment								
Opening backlog	14,289	14,706	18,256	17,292	10,265	10,469	12,292	11,809
Newly approved	2,991	5,761	1,562	1,509	1,463	2,957	784	741
Canceled	401	363	259	29	196	186	130	14
Capital expenditure	2,173	1,848	2,267	3,013	1,063	948	1,137	1,479
Closing backlog	14,706	18,256	17,292	15,759	10,469	12,292	11,809	11,057
Other transportation equipment								
Opening backlog	3,264	3,441	3,834	3,892	2,643	2,725	2,919	2,948
Newly approved	1,294	1,799	1,282	1,491	604	891	631	739
Canceled	−26	−18	−16	−27	−12	−9	8	−13
Capital expenditure	1,143	1,424	1,208	1,414	534	706	594	701
Closing backlog	3,441	3,834	3,892	3,996	2,725	2,919	2,948	2,999
Stone, clay & glass								
Opening backlog	2,027	2,219	2,109	2,113	2,206	2,305	2,249	2,251
Newly approved	751	700	837	817	385	358	432	418
Canceled	−56	39	64	94	−29	20	33	48
Capital expenditure	615	771	769	697	315	394	397	357
Closing backlog	2,219	2,109	2,113	2,139	2,305	2,249	2,251	2,264
Fabricated metals								
Opening backlog	1,100	1,145	1,270	1,243	1,370	1,393	1,460	1,447
Newly approved	310	375	270	359	158	200	134	179
Canceled	−31	−15	36	58	−16	−8	18	29
Capital expenditure	296	265	261	293	151	141	129	146
Closing backlog	1,145	1,270	1,243	1,251	1,393	1,460	1,447	1,451

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	IV-84	I-85	II-85r	III-85p	IV-84	I-85	II-85r	III-85p
Instruments & photo equipment								
Opening backlog	1,904	1,944	1,834	1,815	1,646	1,665	1,610	1,600
Newly approved	1,379	999	958	1,058	670	500	468	508
Canceled	146	58	53	79	71	29	26	38
Capital expenditure	1,193	1,051	924	904	580	526	452	434
Closing backlog	1,944	1,834	1,815	1,890	1,665	1,610	1,600	1,636
Other durable goods†								
Opening backlog	2,592	2,441	2,381	2,031	2,433	2,362	2,332	2,162
Newly approved	410	594	419	1,239	193	296	204	534
Canceled	− 67	27	15	33	− 32	13	7	14
Capital expenditure	628	627	754	674	296	313	367	290
Closing backlog	2,441	2,381	2,031	2,563	2,362	2,332	2,162	2,392
NONDURABLE GOODS								
Opening backlog	49,551	50,056	50,886	53,930	43,949	44,219	44,615	46,147
Newly approved	14,028	13,201	16,650	11,629	6,958	6,573	8,339	5,691
Canceled	1,159	665	1,509	1,430	575	335	757	718
Capital expenditure	12,364	11,706	12,097	12,633	6,112	5,842	6,051	6,205
Closing backlog	50,056	50,886	53,930	51,496	44,219	44,615	46,147	44,915
Food & beverages								
Opening backlog	5,043	5,061	5,531	5,423	4,601	4,609	4,838	4,786
Newly approved	1,518	2,045	1,837	2,172	752	1,000	892	1,029
Canceled	100	30	291	41	50	15	141	19
Capital expenditure	1,400	1,545	1,654	1,607	694	756	803	761
Closing backlog	5,061	5,531	5,423	5,947	4,609	4,838	4,786	5,035
Textiles								
Opening backlog	598	547	535	513	729	702	695	684
Newly approved	229	222	238	77	119	114	120	38
Canceled	27	− 10	68	24	14	− 5	34	12
Capital expenditure	253	244	192	156	132	126	97	78
Closing backlog	547	535	513	401	702	695	684	632
Paper & allied products								
Opening backlog	5,432	5,907	5,715	5,235	4,627	4,871	4,770	4,524
Newly approved	1,955	924	731	864	1,008	486	375	445
Canceled	292	237	331	422	151	125	170	217
Capital expenditure	1,188	879	880	1,057	613	462	451	544
Closing backlog	5,907	5,715	5,235	4,620	4,871	4,770	4,524	4,208
Chemicals & allied products								
Opening backlog	7,720	7,758	8,506	8,433	8,460	8,480	8,859	8,882
Newly approved	3,219	3,414	3,046	2,228	1,605	1,730	1,518	1,080
Canceled	141	126	319	− 50	70	64	159	− 24
Capital expenditure	3,040	2,540	2,800	2,707	1,515	1,287	1,396	1,312
Closing backlog	7,758	8,506	8,433	8,004	8,480	8,859	8,822	8,614
Petroleum and coal products								
Opening backlog	24,945	24,686	24,651	26,977	21,159	21,035	21,018	22,193
Newly approved	5,670	5,619	8,362	5,042	2,729	2,748	4,222	2,508
Canceled	530	294	595	1,005	255	144	300	500
Capital expenditure	5,399	5,360	5,441	5,794	2,598	2,621	2,747	2,882
Closing backlog	24,686	24,651	26,977	25,220	21,035	21,018	22,193	21,319
Rubber products								
Opening backlog	1,364	1,561	1,653	3,117	1,265	1,369	1,401	2,136
Newly approved	615	392	1,829	375	326	199	918	186
Canceled	37	− 103	− 128	− 15	20	− 52	− 64	− 7
Capital expenditure	381	403	493	580	202	219	247	288
Closing backlog	1,561	1,653	3,117	2,927	1,369	1,401	2,136	2,041
Other nondurable goods†								
Opening backlog	4,449	4,536	4,295	4,232	3,110	3,155	3,034	3,004
Newly approved	822	585	607	871	419	296	295	406
Canceled	32	91	33	3	16	46	16	1
Capital expenditure	703	735	637	732	358	371	309	341
Closing backlog	4,536	4,295	4,232	4,368	3,155	3,034	3,004	3,068

See General Notes on page 7.

TABLE 2. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	IV-84 to I-85	I-85 to II-85	II-85 to III-85	III-84 to III-85	IV-84 to I-85	I-85 to II-85	II-85 to III-85	III-84 to III-85
				—APPROPRIATIONS—				
ALL MANUFACTURING	2.9	– 7.9	– 11.4	– 10.6	5.0	– 8.7	– 14.2	– 10.5
ALL MFG. EX MOTOR VEHICLES	– 7.4	7.5	– 11.9	– 10.5	– 6.0	7.1	– 14.7	– 10.5
DURABLE GOODS	11.0	– 34.8	17.2	0.3	14.9	– 36.2	12.9	– 2.1
Primary iron & steel	– 29.9	41.5	– 33.4	3.0	– 27.7	37.5	– 34.8	2.7
Primary nonferrous metals	10.6	– 41.6	97.1	31.4	13.2	– 43.8	96.0	27.7
Electrical machinery & equipment	– 54.1	35.0	29.0	5.2	– 53.1	29.4	27.4	2.3
Nonelectrical machinery	24.0	– 39.8	4.5	– 8.1	27.7	– 40.2	– 3.0	– 14.4
Motor vehicles & equipment	92.6	– 72.9	– 3.4	– 12.5	102.1	– 73.5	– 5.4	– 10.9
Other transportation equipment	39.0	– 28.7	16.3	7.2	47.5	– 29.2	17.2	18.8
Stone, clay & glass	– 6.8	19.6	– 2.4	– 4.3	– 7.0	20.6	– 3.2	– 4.8
Fabricated metals	21.0	– 28.0	33.0	26.0	26.1	– 33.0	33.5	24.3
Instruments & photo equipment	– 27.6	– 4.1	10.4	0.2	– 25.4	– 6.3	8.4	– 2.5
Other durable goods†	44.9	– 29.5	195.7	8.7	53.1	– 31.1	161.4	– 6.0
NONDURABLE GOODS	– 5.9	26.1	– 30.2	– 20.2	– 5.5	26.9	– 31.8	– 18.1
Food & beverages	34.7	– 10.2	18.2	29.5	33.0	– 10.8	15.3	26.4
Textiles	– 3.1	7.2	– 67.6	– 45.8	– 4.1	5.1	– 68.0	– 47.9
Paper & allied products	– 52.7	– 20.9	18.2	– 45.5	– 51.8	– 22.9	18.6	– 46.9
Chemicals & allied products	6.1	– 10.8	– 26.9	– 18.7	7.8	– 12.2	– 28.9	– 21.6
Petroleum & coal products	– 0.9	48.8	– 39.7	– 30.9	0.7	53.6	– 40.6	– 23.9
Rubber products	– 36.3	366.6	– 79.5	42.0	– 38.8	360.4	– 79.7	39.8
Other nondurable goods†	– 28.8	3.8	43.5	0.9	– 29.4	– 0.2	37.6	– 2.6
				—EXPENDITURES—				
ALL MANUFACTURING	– 4.9	6.5	4.2	12.7	– 3.0	5.7	1.7	13.4
ALL MFG. EX MOTOR VEHICLES	– 3.9	5.2	1.4	7.5	– 2.2	4.5	– 1.1	8.0
DURABLE GOODS	– 4.7	10.0	4.1	20.1	– 1.5	7.8	0.9	18.0
Primary iron & steel	0.9	46.0	– 41.4	– 6.3	4.2	41.9	– 42.6	– 6.4
Primary nonferrous metals	– 16.8	– 1.9	16.7	4.9	– 14.9	– 5.6	16.1	1.1
Electrical machinery & equipment	– 21.3	20.2	14.0	17.7	– 19.5	15.2	12.6	14.5
Nonelectrical machinery	6.4	10.7	– 14.0	2.7	9.6	9.9	– 20.2	– 4.3
Motor vehicles & equipment	– 15.0	22.7	32.9	79.2	– 10.8	19.9	30.1	82.6
Other transportation equipment	24.6	– 15.2	17.1	23.0	32.1	– 15.8	17.9	36.4
Stone, clay & glass	25.4	– 0.3	– 9.4	33.5	25.1	0.6	– 10.1	33.2
Fabricated metals	– 10.5	– 1.5	12.3	11.8	– 6.7	– 8.4	12.7	9.8
Instruments & photo equipment	– 11.9	– 12.1	– 2.2	– 15.4	– 9.3	– 14.1	– 4.0	– 17.6
Other durable goods†	– 0.2	20.3	– 10.6	14.0	5.5	17.5	– 21.0	– 1.4
NONDURABLE GOODS	– 5.1	3.1	4.4	5.9	– 4.4	3.6	2.5	8.9
Food & beverages	10.4	7.1	– 2.8	17.6	8.9	6.3	– 5.3	14.8
Textiles	– 3.6	– 21.3	– 18.8	– 47.1	– 4.6	– 22.8	– 19.7	– 48.3
Paper & allied products	– 26.0	0.1	20.1	20.0	– 24.5	– 2.4	20.6	17.0
Chemicals & allied products	– 16.4	10.2	– 3.3	1.7	– 15.1	8.4	– 6.0	– 1.9
Petroleum & coal products	– 0.7	1.5	6.5	1.4	0.9	4.8	4.9	11.7
Rubber products	12.9	14.7	17.6	98.6	8.3	13.1	16.3	95.9
Other nondurable goods†	4.6	– 13.3	14.9	0.8	3.7	– 16.7	10.2	– 2.8

TABLE 3. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS

In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1981	1982	1983	1984	1981	1982	1983	1984
				—APPROPRIATIONS—				
ALL MANUFACTURING	106,956	87,544	88,180	116,056	55,027	43,665	44,655	57,821
ALL MFG. EX MOTOR VEHICLES	103,467	83,629	82,373	99,370	53,234	41,741	41,701	49,612
DURABLE GOODS	42,146	32,031	37,537	59,618	22,355	16,306	19,193	29,740
Primary iron & steel	5,210	1,563	2,113	2,125	2,736	841	1,111	1,113
Primary nonferrous metals	2,482	1,082	1,164	1,363	1,497	564	578	702
Electrical machinery & equipment	5,787	6,663	8,869	11,987	3,073	3,446	4,476	6,018
Nonelectrical machinery	12,700	8,710	7,909	10,854	6,674	4,351	4,049	5,390
Motor vehicles & equipment	3,489	3,915	5,807	16,686	1,793	1,924	2,954	8,209
Other transportation equipment	3,099	3,225	3,601	5,059	1,589	1,599	1,816	2,445
Stone, clay & glass	2,094	1,562	1,625	2,767	1,126	826	849	1,427
Fabricated metals	1,765	1,022	960	1,221	931	531	506	632
Instruments & photo equipment	4,273	3,372	3,614	4,859	2,273	1,753	1,874	2,445
Other durable goods†	1,247	917	1,875	2,697	663	470	980	1,358
NONDURABLE GOODS	64,810	55,513	50,643	56,438	32,672	27,359	25,462	28,081
Food & beverages	5,772	5,792	5,909	6,993	3,022	2,927	2,978	3,470
Textiles	1,150	1,028	1,194	1,104	610	541	624	572
Paper & allied products	5,010	4,006	3,231	5,936	2,704	2,130	1,701	3,088
Chemicals & allied products	12,019	9,476	10,002	11,831	6,328	4,828	5,102	6,018
Petroleum & coal products	36,904	31,524	25,718	25,458	17,973	15,081	12,714	12,393
Rubber products	813	776	965	1,616	431	391	509	807
Other nondurable goods†	3,142	2,911	3,624	3,500	1,603	1,459	1,834	1,732
				—EXPENDITURES—				
ALL MANUFACTURING	101,341	98,614	75,710	90,308	51,949	49,205	38,416	44,870
ALL MFG. EX MOTOR VEHICLES	94,653	93,004	71,703	83,317	48,520	46,456	36,374	41,432
DURABLE GOODS	42,871	39,945	32,254	42,865	22,505	20,322	16,516	21,333
Primary iron & steel	3,405	3,545	2,136	1,984	1,797	1,912	1,130	1,035
Primary nonferrous metals	2,386	1,574	1,207	1,385	1,252	818	604	707
Electrical machinery & equipment	6,069	6,354	6,964	10,100	3,225	3,285	3,522	5,049
Nonelectrical machinery	11,289	10,906	7,768	8,648	5,939	5,425	3,969	4,294
Motor vehicles & equipment	6,688	5,610	4,007	6,991	3,429	2,749	2,042	3,438
Other transportation equipment	3,464	3,156	3,179	4,338	1,770	1,561	1,606	2,060
Stone, clay & glass	1,886	1,726	1,666	2,083	1,016	914	872	1,074
Fabricated metals	1,515	1,513	871	1,025	799	785	458	527
Instruments & photo equipment	3,629	3,827	3,145	4,202	1,931	1,988	1,634	2,102
Other durable goods†	2,540	1,734	1,311	2,109	1,347	885	679	1,048
NONDURABLE GOODS	58,470	58,669	43,456	47,443	29,443	28,883	21,900	23,536
Food & beverages	6,744	5,802	5,426	5,374	3,523	2,933	2,734	2,663
Textiles	1,039	1,044	975	1,164	550	550	511	602
Paper & allied products	3,746	3,653	3,357	3,842	2,025	1,935	1,774	1,998
Chemicals & allied products	11,785	11,180	9,340	11,211	6,199	5,690	4,770	5,694
Petroleum & coal products	31,578	33,317	20,441	21,632	15,303	15,933	10,108	10,477
Rubber products	749	704	889	1,216	398	355	468	617
Other nondurable goods†	2,829	2,969	3,028	3,004	1,445	1,487	1,535	1,486

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1985-II are revised; data for 1985-III are preliminary.

Amounts shown as "canceled" in Table 2 also include adjustments and corrections to appropriations backlogs, such as cost over- or under-runs.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for approximately 75% of all manufacturing corporations' assets in 1979.

Historical data from 1953 available on request (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

TABLE 4. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	July 1983	Oct. 1983	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985
					Inadequate					
All Manufacturing	6.3	8.3	9.6	10.2	8.2	10.0	11.0	10.9	9.1	9.1
Durable goods	9.5	14.7	18.3	18.1	14.2	16.8	15.7	17.4	17.3	17.5
Nondurable goods	3.5	3.2	2.6	3.7	3.2	4.3	6.4	5.3	2.4	2.7
					Sufficient					
All Manufacturing	47.9	50.6	52.9	54.3	55.3	54.4	52.9	50.2	52.7	52.0
Durable goods	50.0	44.3	47.5	49.0	49.0	50.3	53.1	54.4	53.5	48.2
Nondurable goods	46.0	55.6	57.2	58.6	60.5	57.8	52.7	46.5	52.1	54.9
					More Than Adequate					
All Manufacturing	45.8	41.1	37.5	35.5	36.5	35.6	36.1	38.9	38.2	38.9
Durable goods	40.5	41.0	34.2	32.9	36.8	32.9	31.2	28.2	29.2	34.3
Nondurable goods	50.5	41.2	40.2	37.7	36.3	37.9	40.9	48.2	45.5	42.4

TABLE 5. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	July 1983	Oct. 1983	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985
					Expansion					
All Manufacturing	40.6	44.4	46.1	49.2	49.7	52.7	51.4	50.9	49.5	45.6
Durable goods	40.9	46.0	45.2	49.0	51.6	58.8	59.0	60.2	52.4	50.3
Nondurable goods	40.3	43.1	46.9	49.4	48.1	47.6	43.9	42.6	47.1	42.0
					No Change					
All Manufacturing	50.3	44.7	48.3	48.2	46.1	44.8	46.9	42.3	47.3	49.1
Durable goods	48.8	39.9	42.6	45.6	39.2	36.4	37.8	32.9	41.5	40.8
Nondurable goods	51.6	48.5	52.8	50.3	51.9	51.9	56.0	50.7	52.1	55.5
					Reduction					
All Manufacturing	9.2	10.9	5.6	2.6	4.2	2.5	1.7	6.8	3.2	5.3
Durable goods	10.3	14.1	12.2	5.4	9.2	4.8	3.3	6.9	6.1	8.9
Nondurable goods	8.2	8.4	0.3	0.3	0.0	0.6	0.1	6.7	0.8	2.5

TABLE 6. ANTICIPATED SOURCES OF FUNDS FOR CAPITAL EXPENDITURES

Percent Distribution of Responding Companies Weighted by Assets

	1981	1982		1983		1984		1985		1986
	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half (r-3)	First Half (p)
From Internal Sources										
All Manufacturing	83.6	81.3	81.5	87.0	89.9	91.2	89.1	91.2	89.6	89.9
durable goods	83.9	79.7	78.3	85.3	88.2	89.4	87.3	92.8	89.2	90.0
Nondurable goods	83.4	82.6	84.2	88.4	91.3	92.8	90.7	9.8	89.9	89.8
From External Sources										
All Manufacturing	16.4	18.7	18.5	13.0	10.1	8.8	10.9	8.8	10.4	10.1
Durable goods	16.1	20.3	21.7	14.7	11.8	10.6	12.7	7.2	10.8	10.0
Nondurable goods	16.6	17.4	15.8	11.6	8.7	7.2	9.3	10.2	10.1	10.2

TABLE 7. AVAILABILITY OF EXTERNAL CAPITAL FUNDS COMPARED WITH THREE MONTHS EARLIER

Percent Distribution of Responding Companies

	July 1983	Oct. 1983	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985
Easier										
All Manufacturing	9.5	11.4	9.3	5.1	5.0	5.3	8.7	7.0	5.9	6.3
Durable goods	9.6	10.6	9.4	5.2	5.2	5.7	9.2	8.3	6.7	4.5
Nondurable goods	9.4	12.3	9.1	5.1	4.8	4.9	8.2	5.6	4.9	7.6
Same										
All Manufacturing	87.1	86.7	88.2	90.8	91.9	92.2	86.9	89.0	90.2	89.8
Durable goods	86.9	87.3	87.2	91.6	91.6	91.2	85.4	87.6	88.6	89.7
Nondurable goods	87.3	86.1	89.2	89.9	92.2	93.3	88.7	90.7	92.1	89.9
Tighter										
All Manufacturing	3.4	1.9	2.5	4.1	3.1	2.5	4.4	4.0	3.9	3.9
Durable goods	3.5	2.1	3.3	3.1	3.1	3.1	5.4	4.1	4.7	5.8
Nondurable goods	3.3	1.6	1.7	5.1	3.0	1.8	3.1	3.7	3.0	2.4

Please Note: In the interest of speeding the data contained in this publication to you, these series are now available on-line through The Conference Board Data Base. For more information, call Linette Stein Waters at (212) 759-0900.

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Fourth Quarter 1985

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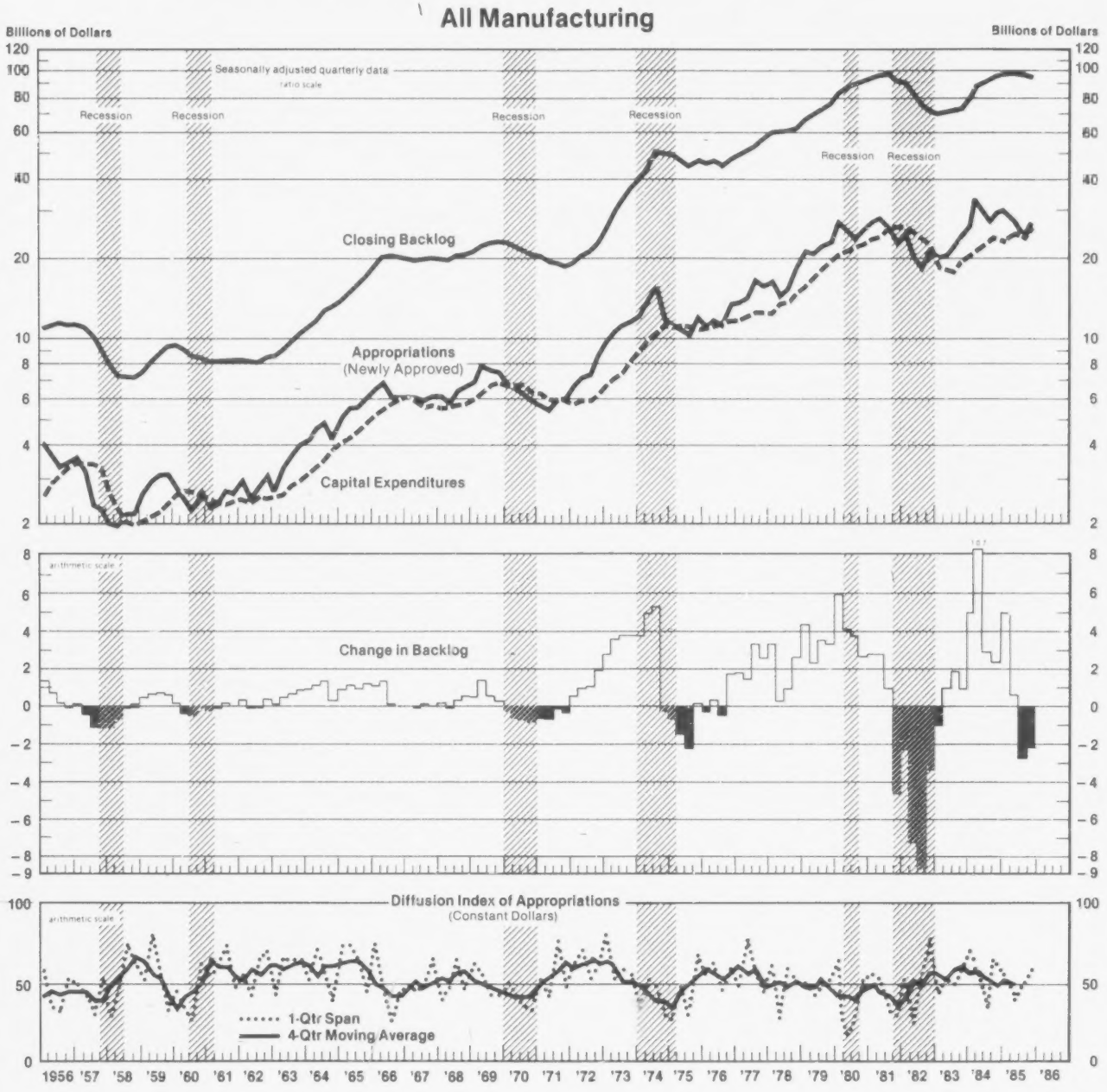
CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION



Surveys conducted by
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The Fourth Quarter Capital Appropriations Survey

Summary Points

- Capital spending by the nation's large manufacturers rose sharply in the fourth quarter of 1985.
- Appropriations for future spending on plant and equipment also turned up.
- But the closing backlog of unspent appropriations continued to fall, signaling a near-term decline in capital spending.
- For the year 1986 as a whole, survey respondents expect continued growth in both appropriations and actual capital expenditures—but when the full impact of the oil price decline is captured, expectations may weaken.
- Capital spending thus far in the expansion has led to a sharp rise in the amount of capital per production worker, helping to boost productivity growth.
- Capital spending programs of most of the nation's large manufacturers will continue to be aimed at improving efficiency rather than expanding capacity.

Introduction

This analysis of the fourth-quarter survey results begins with an account of recent capital spending by U.S. manufacturers, followed by a discussion of the impact of that spending on the capital stock and the rate of productivity growth. Recent capital appropriations and the outlook for capital spending during 1986 are then analyzed. The analysis of the capital stock and productivity uses a concept of the "effective" capital stock. This is defined as the amount of fixed capital actually used in production, and represents the size of the total capital stock adjusted by the rate of capacity utilization.

Capital Expenditures

After a slight decline in the third quarter, capital spending by the 1,000 largest U.S. manufacturers rose sharply during the fourth quarter to $26.6 billion. This big rise was unexpected given previous declines in both the level of new capital appropriations and the closing backlog of unspent appropriations (see chart at left). Movements in these two aggregates indicated a flat spending trend in the fourth quarter. The explanation for the increased pace of spending may lie with the tax reform debate in the U.S. Congress, which makes the year in which capital expenditures occur potentially very important.

A large share of the spending growth during the fourth quarter originated in firms in one industry—the rubber & plastics industry (see Table 3, page 8), and information gathered in our survey indicates that the proposed corporate tax reforms played a role. Overall, *6 percent* of survey respondents reported that they had accelerated the pace of their capital spending during 1985 to avoid the possible loss of investment tax credits and the current favorable depreciation provisions, a figure capable of explaining a small uptick in spending. But *95 percent* of respondents from the rubber & plastics industry accelerated their capital spending programs during 1985 because of the uncertainties surrounding corporate tax reform, helping to explain the surge of spending in this industry. If this is in fact the explanation of the fourth quarter spending surge, we should look for a correction early in 1986.

For the year as a whole, capital expenditures by the nation's large manufacturers totaled $99.9 billion, an annual gain of 11 percent. This follows a 19 percent increase during 1984. According to Commerce Department data, all U.S. manufacturers spent $153.1 billion on new plant and equipment in 1985, a 10 percent rise from 1984.

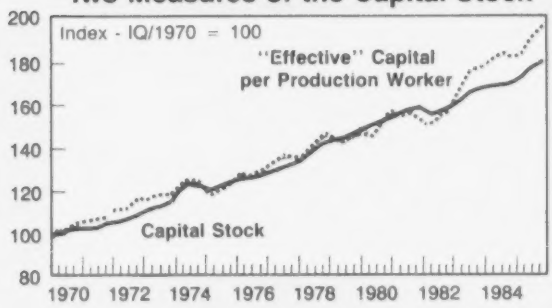
About 70 percent of the 1985 growth in spending in The Conference Board's survey population originated in the durable goods sector, where 7 of 10 industries increased their capital spending (see Table 3). Spending was particularly robust in the motor vehicle industry. In the nondurable goods sector, spending rose by 6 percent in 1985, with 4 of 7 industries reporting increased spending. As previously mentioned, the rubber & plastics industry accounted for most of the spending growth in this area.

Impact on the Capital Stock & Productivity Growth

The rapid growth in capital spending growth during the current business cycle has led to an increase of about 13 percent in the total real capital stock of the manufacturing sector from year-end 1982. The growth rate of the "effective" capital stock has been much greater—

Chart 1

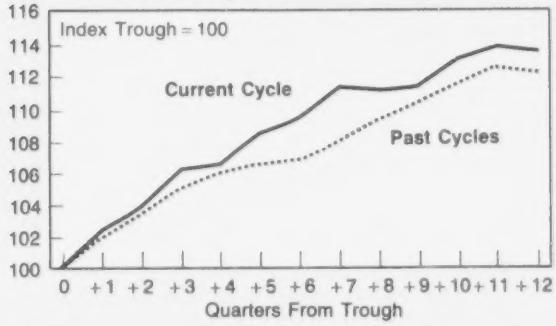
Two Measures of the Capital Stock



Sources: U.S. Department of Commerce; U.S. Department of Labor; The Conference Board

Chart 2

Productivity - U.S. Manufacturing



Sources: U.S. Department of Commerce; The Conference Board.

about 33 percent—and well above other recent economic recoveries. The "effective" capital stock is that portion of the total real capital stock that is actually being used. This is obtained by adjusting the total real capital stock by the rate of capacity utilization.

More importantly, since the number of manufacturing production workers has risen only modestly during this recovery, the amount of "effective" capital per production worker has risen dramatically (see Chart 1). This has contributed to a recovery in the rate of productivity growth in the manufacturing sector. Output per hour in the current cycle is well above the average of past cycles (see Chart 2). (For a more detailed account of the relative performances of the durable and nondurable goods sectors, see Special Analysis on page 4.)

Capital Appropriations

Appropriations for future spending on plant and equipment by the nation's large manufacturers also turned up in the fourth quarter after two consecutive quarterly declines. Appropriations totaled $27.5 billion, up 14 percent from the third quarter and roughly equal with the second quarter level. Most of the fourth quarter growth originated in the nondurable goods sector where 5 of 6 industries reported increases (see Table 3).

But for the year 1985 as a whole, appropriations totaled $107.4 billion, down 7 percent ($8.6 billion) from 1984. The decline was most evident in the durable goods sector—appropriations declined $7.5 billion to $52.1 billion. This followed very rapid growth during 1984 and may in part reflect declining rates of capacity utilization during 1985. Industries in this sector reporting sharp falloffs include electrical machinery and motor vehicles (see Table 1).

The decline in appropriations was far more modest in the nondurable goods sector—appropriations declined $1.1 billion to $55.3 billion. Increases in the food & beverage and rubber industries were offset by declines in other industries.

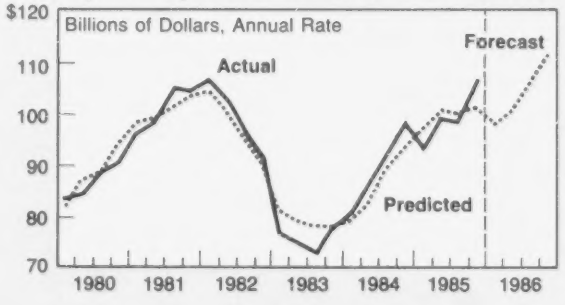
The Capital Spending Outlook

The scenario for capital spending by large manufacturers in 1986 remains essentially unchanged from our third-quarter report: A sluggish first half followed by an increased pace of spending during the second half.

The decline in the closing backlog of unspent appropriations during 1985 signals a decline in capital spending during the first half of 1986 (see Chart 3). Given the big increase in spending during the fourth quarter, the first-half decline could be quite sharp when viewed on a quarter by quarter basis. But survey respondents expect to increase both their appropriations and

Chart 3

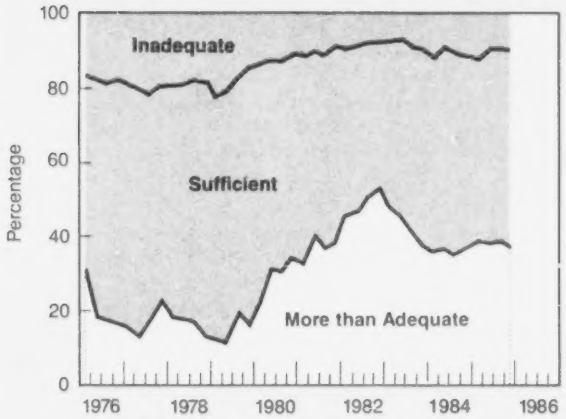
Capital Expenditures-Actual & Predicted



Source: The Conference Board.

Chart 4

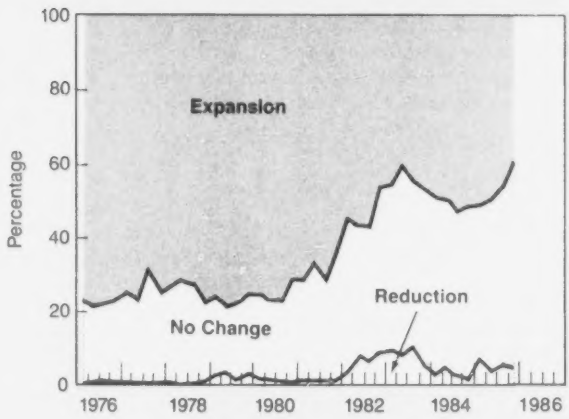
Adequacy of Capital Facilities



Source: The Conference Board

Chart 5

Changes in Capital Facilities



Source: The Conference Board

their spending during 1986. Spending is expected to increase 8 percent from 1985 to $108 billion. While this is below the rate of growth of spending during 1984 and 1985, it represents an improvement on third quarter expectations (see Table A). If there is a downturn in spending in early 1986, it will then have to increase rapidly in the latter part of the year for these expectations to be realized.

Conclusions

The upward shift in expectations and the turnaround in appropriations during the fourth quarter coincided with improved operating and financial conditions in the manufacturing sector. At year-end 1985, new orders, shipments, and capacity utilization began to pick up while inventories continued to decline. The decline in interest rates and the value of the dollar against many foreign currencies suggested that this improvement in business conditions would continue in the months ahead. The first quarter of 1986 has not been one of steady improvement, however, and the outlook for many U.S. manufacturers appears more guarded now than it did just a few months ago.

Also, since the latest survey was completed, several large oil companies have announced rather sharp cutbacks in their capital spending programs. This industry represents about 20 percent of total spending in the manufacturing sector, so unless these cutbacks are offset by increases elsewhere, its unlikely that the expected $108 billion spending level will be attained. Spending in the range of $103-$104 billion (a 3 or 4 percent increase) now appears more likely for 1986.

This is still a more favorable outcome than -0.3 percent growth reported in the most recent Commerce Department survey of the total manufacturing sector. But since the pace of spending by large manufacturers typically exceeds that of manufacturing as a whole in the later stages of the business cycle, the results of the two different surveys are not exceedingly incongruent.

Conference Board survey results also indicate that despite the recent stability of capacity utilization rates, most capital spending programs will continue to be aimed at increasing efficiency rather than expanding productive capacity (see Charts 4 & 5). This bodes well for future gains in productivity but not for manufacturing employment, at least in the near-term.

Doug Cliggott

TABLE A: CAPITAL EXPENDITURES: 1984, 1985 AND 1986*
(Annual percent change)

	Expenditures			
	1984	1985	1986a	1986b
All Manufacturing	19%	11%	5%	8%
Durable Goods	33	16	-5	5
Nondurable Goods	9	6	16	10

*Based on survey respondents' own expectations.
a—October-November survey b—January-February survey
Source: The Conference Board

COMPARING THE DURABLE AND NONDURABLE GOODS SECTORS

Productivity

While productivity growth, when measured for manufacturing as a whole, has outpaced the average of past business cycle expansions, the relative performance of the durable and nondurable goods sectors has varied dramatically during this cycle. As illustrated in Chart A, productivity growth in the durable goods sector during the current expansion has not only exceeded that of the two 1970's business cycles, but until the fourth quarter of 1985 has outpaced the first three years of the long 1960's expansion. By contrast, productivity growth in the nondurable goods sector has remained consistently below that of the three previous expansions.

Unit labor costs

Unit labor costs are the ratio of hourly compensation to output per hour (a common measure of productivity). During the current expansion, growth of hourly compensation has been very modest compared with past business cycles. And because increases in hourly compensation do not vary much between sectors, changes in unit labor costs closely reflect changes in output per hour. If productivity growth is high and increases in hourly compensation relatively low, unit labor costs will be flat or even declining. That is exactly what has happened in the durable goods sector during the current expansion (see Chart B). Changes in unit labor costs have thus far tracked quite closely the 1960's expansion and are well below the 1970's expansions.

Similarly, reflecting the relatively poor productivity performance, changes in unit labor costs in the nondurable goods sector have been high when compared with prior business cycles. It was not until the fourth quarter of 1985 that they moved below the expansion that started in 1970.

Implications

One reason for the strong relative performance of the durable goods industry during the current expansion may be the fact that its expenditures on new plant and equipment have been rising at a much faster pace (see Chart C). Given that much of this investment has been geared toward improving productive efficiency rather than increasing capacity, the good productivity growth and concurrent declines in unit labor costs in the durable goods sector appear to validate this course of action.

In an era of heightened international competition, U.S. manufacturers of durable goods now seem better equiped to face the competitive pressures eminating from abroad in the years ahead.

G.U. Krueger

Chart A

Productivity: Current and Past Expansions

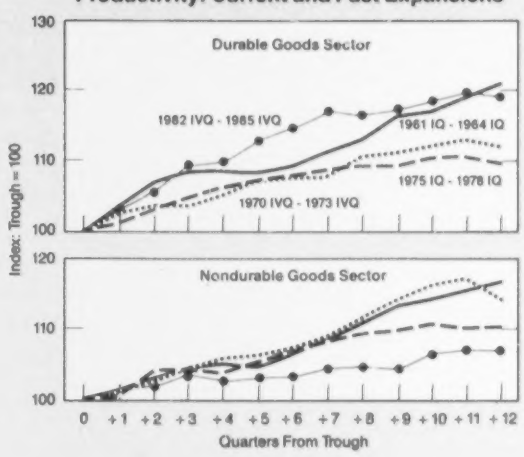


Chart B

Unit Labor Costs: Current and Past Expansions

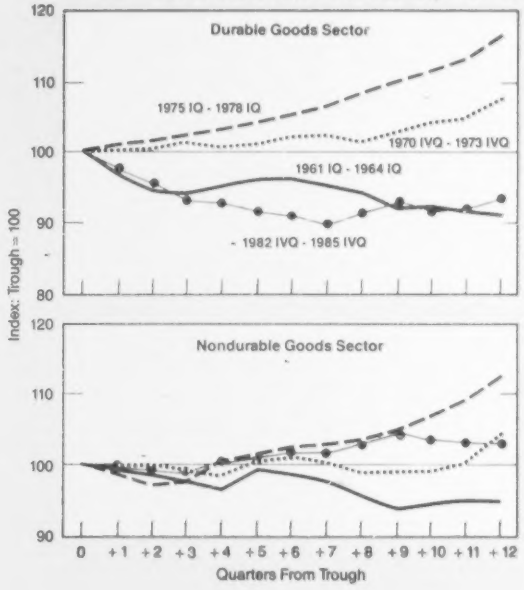
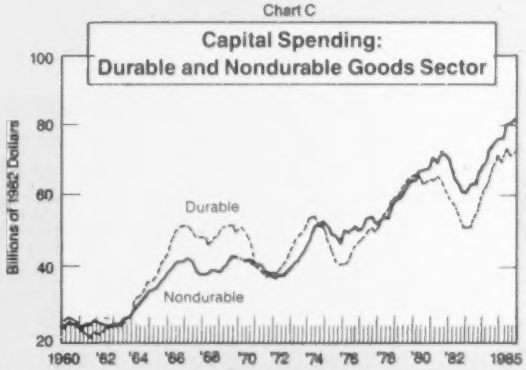


Chart C

Capital Spending: Durable and Nondurable Goods Sector



Sources: U.S. Department of Commerce; U.S. Department of Labor; The Conference Board.

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS

In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1982	1983	1984	1985(p)	1982	1983	1984	1985(p)
				—APPROPRIATIONS—				
ALL MANUFACTURING	87,544	88,180	116,056	107,440	43,665	44,655	57,821	52,899
ALL MFG. EX PETROLEUM	56,020	62,462	90,598	83,067	28,584	31,941	45,428	40,950
DURABLE GOODS	32,031	37,537	59,618	52,108	16,306	19,193	29,740	25,652
Primary iron & steel	1,563	2,113	2,125	1,997	841	1,111	1,113	1,034
Primary nonferrous metals	1,082	1,164	1,363	1,246	564	578	702	628
Electrical machinery & equipment	6,663	8,869	11,987	8,256	3,446	4,476	6,018	4,034
Nonelectrical machinery	8,710	7,909	10,854	11,472	4,351	4,049	5,390	5,710
Motor vehicles & equipment	3,915	5,807	16,686	11,762	1,924	2,954	8,209	5,749
Other transportation equipment	3,225	3,601	5,059	6,298	1,599	1,816	2,445	3,024
Stone, clay & glass	1,562	1,625	2,767	2,946	826	849	1,427	1,474
Fabricated metals	1,022	960	1,221	1,360	531	506	632	689
Instruments & photo equipment	3,372	3,614	4,859	4,049	1,753	1,874	2,445	2,009
Other durable goods†	917	1,875	2,697	2,722	470	980	1,358	1,301
NONDURABLE GOODS	55,513	50,643	56,438	55,332	27,359	25,462	28,081	27,247
Food & beverages	5,792	5,909	6,993	8,178	2,927	2,978	3,470	3,952
Textiles	1,028	1,194	1,104	710	541	624	572	355
Paper & allied products	4,006	3,231	5,936	3,271	2,130	1,701	3,088	1,681
Chemicals & allied products	9,476	10,002	11,831	11,570	4,828	5,102	6,018	5,740
Petroleum & coal products	31,524	25,718	25,458	24,373	15,081	12,714	12,393	11,949
Rubber products	776	965	1,616	4,358	391	509	807	2,181
Other nondurable goods†	2,911	3,624	3,500	2,872	1,459	1,834	1,732	1,388
				—EXPENDITURES—				
ALL MANUFACTURING	98,614	75,710	90,308	99,924	49,205	38,416	44,870	49,319
ALL MFG. EX PETROLEUM	65,297	55,269	68,676	78,006	33,272	28,308	34,393	38,512
DURABLE GOODS	39,945	32,254	42,865	49,649	20,322	16,516	21,333	24,484
Primary iron & steel	3,545	2,136	1,984	2,612	1,912	1,130	1,035	1,340
Primary nonferrous metals	1,574	1,207	1,385	1,289	818	604	707	649
Electrical machinery & equipment	6,354	6,964	10,100	9,103	3,285	3,522	5,049	4,445
Nonelectrical machinery	10,906	7,768	8,648	10,308	5,425	3,969	4,294	5,151
Motor vehicles & equipment	5,610	4,007	6,991	10,423	2,749	2,042	3,438	5,122
Other transportation equipment	3,156	3,179	4,338	5,205	1,561	1,606	2,060	2,485
Stone, clay & glass	1,726	1,666	2,083	2,914	914	872	1,074	1,463
Fabricated metals	1,513	871	1,025	1,162	785	458	527	585
Instruments & photo equipment	3,827	3,145	4,202	3,796	1,988	1,634	2,102	1,884
Other durable goods†	1,734	1,311	2,109	2,837	885	679	1,048	1,359
NONDURABLE GOODS	58,669	43,456	47,443	50,275	28,883	21,900	23,536	24,835
Food & beverages	5,802	5,426	5,374	6,567	2,933	2,734	2,663	3,170
Textiles	1,044	975	1,164	748	550	511	602	375
Paper & allied products	3,653	3,357	3,842	4,004	1,935	1,774	1,998	2,056
Chemicals & allied products	11,180	9,340	11,211	10,690	5,690	4,770	5,694	5,302
Petroleum & coal products	33,317	20,441	21,632	21,918	15,933	10,108	10,477	10,807
Rubber products	704	889	1,216	3,579	355	468	617	1,789
Other nondurable goods†	2,969	3,028	3,004	2,769	1,487	1,535	1,486	1,337

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1985-III are revised; data for 1985-IV are preliminary.

Amounts shown as "canceled" in Table 2 also include adjustments and corrections to appropriations backlogs, such as cost over- or under-runs.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for approximately 75% of all manufacturing corporations' assets in 1979.

Historical data from 1953 available on request (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	I-85	II-85	III-85r	IV-85p	I-85	II-85	III-85r	IV-85p
ALL MANUFACTURING								
Opening backlog	94,367	99,351	99,880	97,178	84,416	86,935	87,215	85,828
Newly approved	29,938	27,560	24,167	27,499	15,084	13,767	11,713	13,603
Canceled	1,600	2,120	2,139	2,995	811	1,063	1,053	1,482
Capital expenditure	23,354	24,911	24,730	26,643	11,754	12,424	12,045	13,203
Closing backlog	99,351	99,880	97,178	95,039	86,935	87,215	85,828	84,747
DURABLE GOODS								
Opening backlog	44,311	48,465	45,950	44,856	40,197	42,320	41,068	40,492
Newly approved	16,737	10,910	12,031	12,452	8,510	5,427	5,813	6,140
Canceled	935	611	826	2,384	475	306	404	1,181
Capital expenditure	11,648	12,814	12,299	12,802	5,912	6,374	5,985	6,325
Closing backlog	48,465	45,950	44,856	42,122	42,320	41,068	40,492	39,126
Primary iron & steel								
Opening backlog	2,073	1,980	1,783	1,752	4,392	4,342	4,239	4,224
Newly approved	468	662	632	176	251	345	325	88
Canceled	26	78	164	111	14	41	84	56
Capital expenditure	535	781	499	754	287	407	256	378
Closing backlog	1,980	1,783	1,752	1,063	4,342	4,239	4,224	3,878
Primary nonferrous metals								
Opening backlog	2,526	2,538	2,374	2,334	3,123	3,129	3,047	3,027
Newly approved	291	170	315	486	150	84	159	246
Canceled	−38	23	7	246	−20	11	4	124
Capital expenditure	317	311	348	313	164	155	175	158
Closing backlog	2,538	2,374	2,334	2,261	3,129	3,047	3,027	2,991
Electrical machinery & equipment								
Opening backlog	6,713	6,111	5,653	5,431	5,503	5,198	4,976	4,867
Newly approved	1,724	2,327	2,167	2,067	874	1,130	1,058	1,006
Canceled	82	87	203	489	42	42	99	238
Capital expenditure	2,244	2,698	2,186	2,077	1,137	1,310	1,068	1,011
Closing backlog	6,111	5,653	5,431	4,932	5,198	4,976	4,867	4,624
Nonelectrical machinery								
Opening backlog	7,103	8,152	7,754	7,745	6,261	6,791	6,592	6,588
Newly approved	4,026	2,423	2,523	2,535	2,034	1,216	1,185	1,327
Canceled	411	−20	190	523	208	−10	89	274
Capital expenditure	2,566	2,841	2,342	2,551	1,296	1,425	1,100	1,335
Closing backlog	8,152	7,754	7,745	7,206	6,791	6,592	6,588	6,306
Motor vehicles & equipment								
Opening backlog	14,706	18,256	17,292	15,776	10,469	12,292	11,809	11,059
Newly approved	5,761	1,562	1,514	3,061	2,957	784	749	1,485
Canceled	363	259	29	488	186	130	14	237
Capital expenditure	1,848	2,267	3,001	3,149	948	1,137	1,485	1,527
Closing backlog	18,256	17,292	15,776	15,200	12,292	11,809	11,059	10,780
Other transportation equipment								
Opening backlog	3,441	3,834	3,892	4,014	2,725	2,919	2,948	3,009
Newly approved	1,799	1,282	1,427	1,461	891	631	711	643
Canceled	−18	16	−22	201	−9	8	−11	88
Capital expenditure	1,424	1,208	1,327	1,268	706	594	661	558
Closing backlog	3,834	3,892	4,014	4,006	2,919	2,948	3,009	3,006
Stone, clay & glass								
Opening backlog	2,219	2,109	2,113	2,227	2,305	2,249	2,251	2,306
Newly approved	700	837	875	561	358	432	426	285
Canceled	39	64	65	98	20	33	32	50
Capital expenditure	771	769	696	692	394	397	339	351
Closing backlog	2,109	2,113	2,227	1,998	2,249	2,251	2,306	2,190
Fabricated metals								
Opening backlog	1,145	1,270	1,243	1,258	1,393	1,460	1,447	1,454
Newly approved	375	270	366	327	200	134	183	164
Canceled	−15	36	58	−12	− 8	188	29	− 6
Capital expenditure	265	261	293	330	141	129	147	165
Closing backlog	1,270	1,243	1,258	1,267	1,460	1,447	1,454	1,459

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	I-85	II-85	III-85r	IV-85p	I-85	II-85	III-85r	IV-85p
Instruments & photo equipment								
Opening backlog	1,944	1,834	1,815	1,767	1,665	1,610	1,600	1,577
Newly approved	999	958	984	1,100	500	468	492	558
Canceled	58	53	99	90	29	26	49	46
Capital expenditure	1,051	924	933	906	526	452	466	460
Closing backlog	1,834	1,815	1,767	1,871	1,610	1,600	1,577	1,629
Other durable goods†								
Opening backlog	2,441	2,381	2,031	2,552	2,362	2,332	2,162	2,385
Newly approved	594	419	1,228	678	296	204	526	340
Canceled	27	15	33	150	13	7	14	75
Capital expenditure	627	754	674	762	313	367	289	382
Closing backlog	2,381	2,031	2,552	2,318	2,332	2,162	2,385	2,268
NONDURABLE GOODS								
Opening backlog	50,056	50,886	53,930	52,322	44,219	44,615	46,147	45,337
Newly approved	13,201	16,650	12,136	15,047	6,573	8,339	5,899	7,463
Canceled	665	1,509	1,313	611	335	757	650	300
Capital expenditure	11,706	12,097	12,431	13,841	5,842	6,051	6,060	6,878
Closing backlog	50,886	53,930	52,322	52,917	44,615	46,147	45,337	45,621
Food & beverages								
Opening backlog	5,061	5,531	5,423	5,948	4,609	4,838	4,786	5,037
Newly approved	2,045	1,837	2,057	2,254	1,000	892	985	1,072
Canceled	30	291	47	131	15	141	23	62
Capital expenditure	1,545	1,654	1,485	1,866	756	803	711	887
Closing backlog	5,531	5,423	5,948	6,205	4,838	4,786	5,037	5,160
Textiles								
Opening backlog	547	535	513	413	702	695	684	633
Newly approved	222	238	100	161	114	120	51	78
Canceled	−10	68	22	20	− 5	34	11	10
Capital expenditure	244	192	178	138	126	97	91	66
Closing backlog	535	513	413	416	695	684	633	635
Paper & allied products								
Opening backlog	5,907	5,715	5,235	4,647	4,871	4,770	4,524	4,219
Newly approved	924	731	887	660	486	375	460	337
Canceled	237	331	418	−159	125	170	217	−81
Capital expenditure	879	880	1,057	1,138	462	451	548	581
Closing backlog	5,715	5,235	4,647	4,328	4,770	4,524	4,219	4,056
Chemicals & allied products								
Opening backlog	7,758	8,506	8,433	8,014	8,480	8,859	8,822	8,618
Newly approved	3,414	3,046	2,221	2,936	1,730	1,518	1,085	1,471
Canceled	126	319	−36	294	64	159	−18	147
Capital expenditure	2,540	2,800	2,676	2,655	1,287	1,396	1,307	1,330
Closing backlog	8,506	8,433	8,014	8,001	8,859	8,822	8,618	8,612
Petroleum and coal products								
Opening backlog	24,686	24,651	26,977	25,986	21,035	21,018	22,193	21,714
Newly approved	5,619	8,362	5,638	5,894	2,748	4,222	2,727	2,953
Canceled	294	595	877	275	144	300	424	138
Capital expenditure	5,360	5,441	5,752	5,360	2,621	2,747	2,782	2,685
Closing backlog	24,651	26,977	25,986	26,245	21,018	22,193	21,714	21,844
Rubber products								
Opening backlog	1,561	1,653	3,117	2,935	1,369	1,401	2,136	2,045
Newly approved	392	1,829	379	2,226	199	918	190	1,112
Canceled	−103	−128	−15	32	−52	−64	− 8	16
Capital expenditure	403	493	576	1,984	219	247	289	991
Closing backlog	1,653	3,117	2,935	3,145	1,401	2,136	2,045	2,150
Other nondurable goods†								
Opening backlog	4,536	4,295	4,232	4,379	3,155	3,034	3,004	3,073
Newly approved	585	607	854	916	296	295	401	441
Canceled	91	33	0	18	46	16	0	9
Capital expenditure	735	637	707	700	371	309	332	337
Closing backlog	4,295	4,232	4,379	4,577	3,034	3,004	3,073	3,168

See General Notes on page 5

TABLE 3. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	I-85 to II-85	II-85 to III-85	III-85 to IV-85	IV-84 to IV-85	I-85 to II-85	II-85 to III-85	III-85 to IV-85	IV-84 to IV-85
				—APPROPRIATIONS—				
ALL MANUFACTURING	-7.9	-12.3	13.8	-5.5	-8.7	-14.9	16.1	-5.3
ALL MFG. EX PETROLEUM	-21.1	-3.5	16.6	-7.8	-22.6	-5.9	18.5	-8.5
DURABLE GOODS	-34.8	10.3	3.5	-17.4	-36.2	7.1	5.6	-17.1
Primary iron & steel	41.5	-4.5	-72.2	-73.7	37.5	-5.8	-72.8	-74.6
Primary nonferrous metals	-41.6	85.3	54.3	84.8	-43.8	88.0	54.8	85.0
Electrical machinery & equipment	35.0	-6.9	-4.6	-45.0	29.4	-6.3	-5.0	-46.0
Nonelectrical machinery	-39.8	4.1	0.5	-21.9	-40.2	-2.5	12.0	-16.7
Motor vehicles & equipment	-72.9	-3.1	102.2	2.3	-73.5	-4.4	98.2	1.5
Other transportation equipment	-28.7	11.3	2.4	12.9	-29.2	12.6	-9.5	6.5
Stone, clay & glass	19.6	4.5	-35.9	-25.3	20.6	-1.4	-33.2	-26.0
Fabricated metals	-28.0	35.6	-10.7	5.5	-33.0	37.1	-10.7	3.8
Instruments & photo equipment	-4.1	2.7	11.8	-20.2	-6.3	4.9	13.6	-16.7
Other durable goods†	-29.5	193.1	-44.8	65.4	-31.1	157.7	-35.5	76.2
NONDURABLE GOODS	26.1	-27.1	24.0	7.3	26.9	-29.3	26.5	7.3
Food & beverages	-10.2	12.0	9.6	48.5	-10.8	10.4	8.8	42.6
Textiles	7.2	-58.0	61.0	-29.7	5.1	-57.6	52.4	-34.5
Paper & allied products	-20.9	21.3	-25.6	-66.2	-22.9	22.7	-26.7	-66.6
Chemicals & allied products	-10.8	-27.1	32.2	-8.8	-12.2	-28.5	35.6	-8.3
Petroleum & coal products	48.8	-32.6	4.5	4.0	53.6	-35.4	8.3	8.2
Rubber products	366.6	-79.3	487.3	262.0	360.4	-79.3	485.4	241.1
Other nondurable goods†	3.8	40.7	7.3	11.4	-0.2	36.0	10.1	5.3
				—EXPENDITURES—				
ALL MANUFACTURING	6.5	-0.7	7.7	8.4	5.7	-3.1	9.6	9.0
ALL MFG. EX PETROLEUM	8.0	-2.5	12.1	10.9	6.0	-4.3	13.5	10.5
DURABLE GOODS	10.0	-4.0	4.1	4.7	7.8	-6.1	5.7	5.4
Primary iron & steel	46.0	-36.1	51.1	42.3	41.9	-37.0	47.4	37.5
Primary nonferrous metals	-1.9	11.9	-10.1	-17.8	-5.6	13.6	-9.8	-17.7
Electrical machinery & equipment	20.2	-19.0	-5.0	-27.2	15.2	-18.5	-5.4	-28.5
Nonelectrical machinery	10.7	-17.6	8.9	5.8	9.9	-22.8	21.4	12.8
Motor vehicles & equipment	22.7	32.4	4.9	44.9	19.9	30.6	2.9	43.7
Other transportation equipment	-15.2	9.9	-4.4	10.9	-15.8	11.2	-15.5	4.5
Stone, clay & glass	-0.3	-9.5	-0.6	12.5	0.6	-14.6	3.6	11.4
Fabricated metals	-1.5	12.3	12.6	11.5	-8.4	13.6	12.6	9.3
Instruments & photo equipment	-12.1	1.0	-2.9	-24.1	-14.1	3.2	-1.4	-20.7
Other durable goods†	20.3	-10.6	13.1	21.3	17.5	-21.4	32.2	29.1
NONDURABLE GOODS	3.1	2.8	11.3	11.9	3.6	0.2	13.5	12.5
Food & beverages	7.1	-10.2	25.7	33.3	6.3	-11.5	24.7	27.8
Textiles	-21.3	-7.3	-22.5	-45.5	-22.8	-6.5	-26.6	-50.0
Paper & allied products	0.1	20.1	7.7	-4.2	-2.4	21.4	6.0	-5.2
Chemicals & allied products	10.2	-4.4	-0.8	-12.7	8.4	-6.3	1.8	-12.2
Petroleum & coal products	1.5	5.7	-6.8	-0.7	4.8	1.3	-3.5	3.3
Rubber products	14.7	16.8	244.4	420.7	13.1	16.7	243.3	390.6
Other nondurable goods†	-13.3	11.0	-1.0	-0.4	-16.7	7.3	1.6	-5.9

TABLE 4. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Oct. 1983	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986
					Inadequate					
All Manufacturing	8.3	9.6	10.2	8.2	10.0	11.0	10.9	9.1	9.1	9.4
Durable goods	14.7	18.3	18.1	14.2	16.8	15.7	17.4	17.3	17.5	16.8
Nondurable goods	3.2	2.6	3.7	3.2	4.3	6.4	5.3	2.4	2.7	2.7
					Sufficient					
All Manufacturing	50.6	52.9	54.3	55.3	54.4	52.9	50.2	52.7	52.0	52.9
Durable goods	44.3	47.5	49.0	49.0	50.3	53.1	54.4	53.5	48.2	47.5
Nondurable goods	55.6	57.2	58.6	60.5	57.8	52.7	46.5	52.1	54.9	57.8
					More Than Adequate					
All Manufacturing	41.1	37.5	35.5	36.5	35.6	36.1	38.9	38.2	38.9	37.7
Durable goods	41.0	34.2	32.9	36.8	32.9	31.2	28.2	29.2	34.3	35.7
Nondurable goods	41.2	40.2	37.7	36.3	37.9	40.9	48.2	45.5	42.4	39.5

TABLE 5. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Oct. 1983	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986
					Expansion					
All Manufacturing	44.4	46.1	49.2	49.7	52.7	51.4	50.9	49.5	45.6	39.4
Durable goods	46.0	45.2	49.0	51.6	58.8	59.0	60.2	52.4	50.3	45.9
Nondurable goods	43.1	46.9	49.4	48.1	47.6	43.9	42.6	47.1	42.0	33.6
					No Change					
All Manufacturing	44.7	48.3	48.2	46.1	44.8	46.9	42.3	47.3	49.1	55.4
Durable goods	39.9	42.6	45.6	39.2	36.4	37.8	32.9	41.5	40.8	45.7
Nondurable goods	48.5	52.8	50.3	51.9	51.9	56.0	50.7	52.1	55.5	64.2
					Reduction					
All Manufacturing	10.9	5.6	2.6	4.2	2.5	1.7	6.8	3.2	5.3	5.2
Durable goods	14.1	12.2	5.4	9.2	4.8	3.3	6.9	6.1	8.9	8.4
Nondurable goods	8.4	0.3	0.3	0.0	0.6	0.1	6.7	0.8	2.5	2.2

Please Note: In the interest of speeding the data contained in this publication to you, these series are now available on-line through The Conference Board Data Base. For more information, call Linette Stein Waters at (212) 759-0900.

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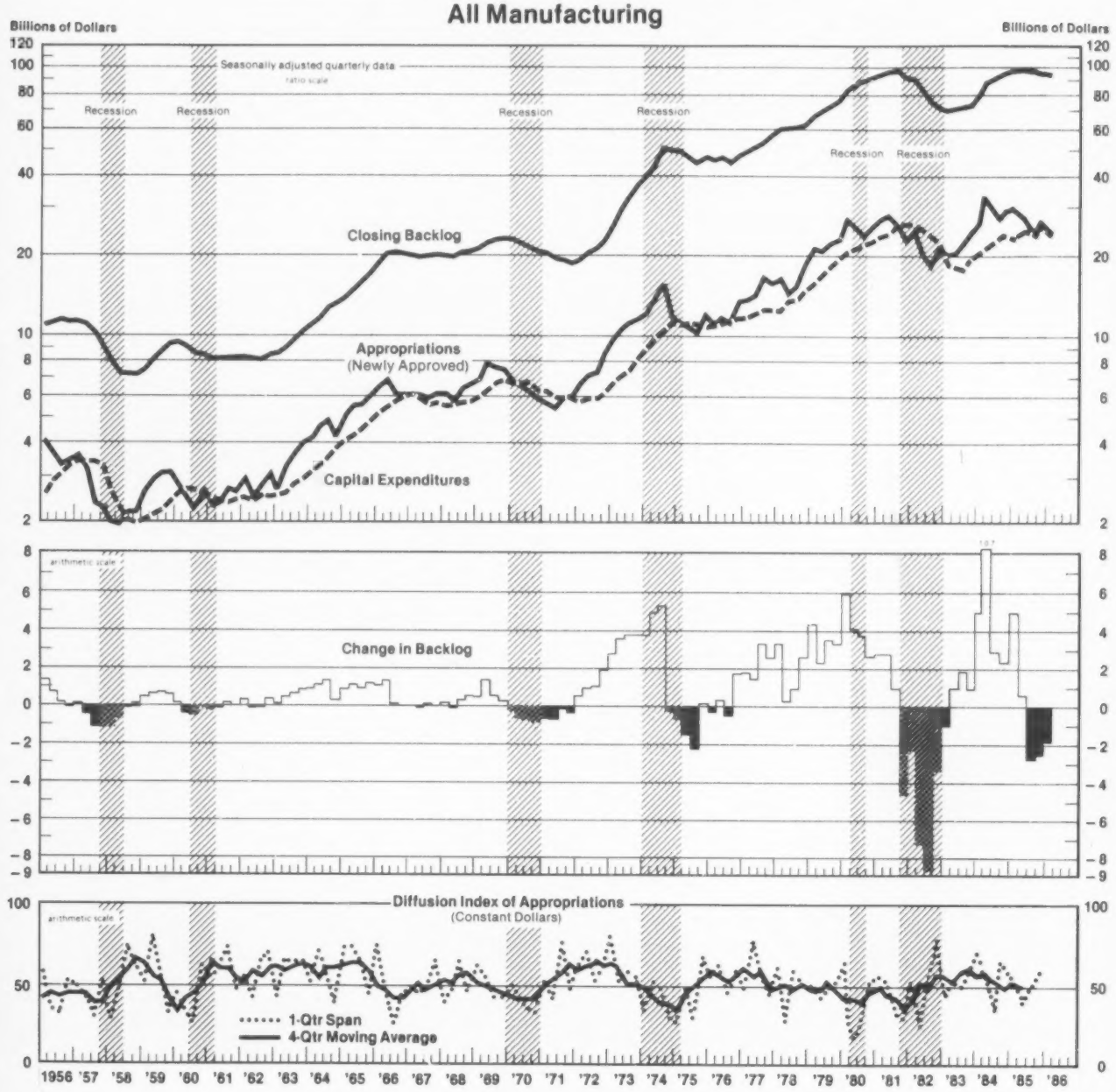

Surveys conducted by
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The First Quarter Survey of Capital Appropriations

Highlights

- Appropriations decline by 10% from fourth quarter
- Capital expenditures also fall sharply
- Closing backlog of unspent appropriations continues to decline
- Capital spending now expected to increase by only 1.7% in 1986, primarily because of a sharp cutback in spending by the petroleum industry.

Capital Expenditures

After ending 1985 on a strong note, capital spending by the 1,000 largest U.S. manufacturers fell sharply in the first quarter of 1986. This decline was expected, however, as previous survey results had indicated that much of the spending growth at year-end 1985 was "borrowed" from 1986 in anticipation of changes in the tax code. (It is widely believed that any tax reform measure would repeal the investment tax credit, retroactive to January 1, 1986.)

If the last two quarters (IV-85 and I-86) are averaged, the level of capital spending by large manufacturers has been essentially unchanged since the second quarter of 1985. This is probably a more accurate picture of the investment performance of large manufacturers during the past year than one depicting a sharp rise followed by an equally sharp decline.

The first-quarter investment decline is not primarily the result of weak spending in the petroleum industry. In fact, if that industry is excluded from the manufacturing totals, the spending decline in the first quarter actually steepens (Table 2).

Capital Appropriations

Appropriations for future spending on plant and equipment also declined in the first quarter. New appropriations totaled $24.5 billion, 8.5 percent below the 1985 quarterly average. The adverse effect of the sharp decline in oil prices on investment spending is evident in these figures—in the petroleum industry, new appropriations declined by $1.6 billion in the first quarter to $4.7 billion. Excluding the petroleum industry softens the decline in appropriations but does not eliminate it: Appropriations declined in 10 of 17 industries (Tables 1 & 2).

The relatively low level of appropriations can be attributed to continued slow growth of output in the manufacturing sector. According to Federal Reserve Board data, manufacturing output increased by only 2.3 percent from the first quarter of 1985 to the first quarter of 1986. During that same time, manufacturing capacity increased by 3.1 percent. That pushed manufacturers' operating rates below 80 percent for the first time in two years. With growth in capacity outpacing growth in output, the manufacturing sector needs to rein in the growth in productive capacity.

Because of their excess capacity, the majority of respondents do not expect their current spending programs to expand their capital facilities (Tables 4 & 5). Capital expenditures and cancellations of prior appropriations have outpaced new appropriations for three straight quarters, leading to a steady decline in the backlog of unspent appropriations.

The Spending Outlook

These trends in appropriations and the closing backlog suggest that spending will be about $24 billion in the second quarter, unchanged from the first quarter.

But the picture for some industries in the second half of 1986 is generally a bit brighter. Survey respondents report that for the year as a whole they now expect to increase spending by 1.7 percent, to $101.3 billion. While this spending target is well below the expectations of three months ago, it does imply a pick-up in spending during the second half of 1986. Increased capital spending is likely in the food and beverage, fabricated metals, textile and aerospace industries. But these increases will be largely offset by the decline in spending in the petroleum industry.

The key to growth of capital spending in 1986 may lie in the machinery industries. That sector accounts for about 20 percent of capital spending by the 1,000 largest manufacturers, and includes many producers of high technology items. At this time, the outlook for capital spending by large machinery firms shows little change from 1985 levels. If demand for these products were to pick up, spending plans might also be revised upward. But at present, new orders and shipments remain weak in this sector.

Thus, capital spending by the 1,000 largest manufacturers will likely increase on a quarterly basis in the second half of 1986, although it will remain at about 1985's level for the year as a whole.

—Douglas Cliggott

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Millions of Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	II-85	III-85	IV-85r	I-86p	II-85r	III-85r	IV-85r	I-86p
ALL MANUFACTURING								
Opening backlog	99,351	99,880	97,178	94,584				
Newly approved	27,560	24,167	27,190	24,504	27,518	23,975	26,918	24,078
Canceled	2,120	2,139	3,448	2,539	2,117	2,125	3,407	2,498
Capital expenditure	24,911	24,730	26,336	23,922	24,869	24,544	26,077	23,505
Closing backlog	99,880	97,178	94,584	92,627				
DURABLE GOODS								
Opening backlog	48,465	45,950	44,856	41,793				
Newly approved	10,910	12,031	12,005	12,651	10,889	11,933	11,855	12,448
Canceled	611	826	2,392	1,834	610	820	2,361	1,806
Capital expenditure	12,814	12,299	12,676	11,719	12,789	12,206	12,524	11,531
Closing backlog	45,950	44,856	41,793	40,891				
Primary iron & steel								
Opening backlog	1,980	1,783	1,752	1,092				
Newly approved	662	632	181	998	664	630	180	987
Canceled	78	164	105	- 22	78	163	104	- 22
Capital expenditure	781	499	736	636	783	497	732	629
Closing backlog	1,783	1,752	1,092	1,476				
Primary nonferrous metals								
Opening backlog	2,538	2,374	2,334	2,194				
Newly approved	170	315	475	380	170	314	473	374
Canceled	23	7	261	48	23	7	260	47
Capital expenditure	311	348	354	385	310	346	352	379
Closing backlog	2,374	2,334	2,194	2,141				
Electrical machinery & equipment								
Opening backlog	6,111	5,653	5,431	4,864				
Newly approved	2,327	2,167	2,066	1,430	2,317	2,151	2,047	1,406
Canceled	87	203	576	70	87	202	571	69
Capital expenditure	2,698	2,186	2,057	1,603	2,687	2,170	2,039	1,576
Closing backlog	5,653	5,431	4,864	4,621				
Nonelectrical machinery								
Opening backlog	8,152	7,754	7,745	7,129				
Newly approved	2,423	2,523	2,474	2,417	2,420	2,497	2,416	2,378
Canceled	– 20	190	617	582	– 20	188	602	573
Capital expenditure	2,841	2,342	2,473	1,760	2,838	2,318	2,415	1,731
Closing backlog	7,754	7,745	7,129	7,204				
Motor vehicles & equipment								
Opening backlog	18,256	17,292	15,776	15,181				
Newly approved	1,562	1,514	3,012	2,966	1,560	1,505	2,983	2,926
Canceled	259	29	448	790	259	29	444	779
Capital expenditure	2,267	3,001	3,159	3,349	2,264	2,982	3,129	3,304
Closing backlog	17,292	15,776	15,181	14,008				
Other transportation equipment								
Opening backlog	3,834	3,892	4,014	3,941				
Newly approved	1,282	1,427	1,327	1,839	1,278	1,419	1,304	1,807
Canceled	16	– 22	196	104	16	– 22	193	102
Capital expenditure	1,208	1,327	1,204	1,492	1,204	1,319	1,183	1,466
Closing backlog	3,892	4,014	3,941	4,184				
Stone, clay & glass								
Opening backlog	2,109	2,113	2,227	2,017				
Newly approved	837	875	560	534	838	868	557	527
Canceled	64	65	91	104	64	65	91	103
Capital expenditure	769	696	679	635	770	691	676	627
Closing backlog	2,113	2,227	2,017	1,812				
Fabricated metals								
Opening backlog	1,270	1,243	1,258	1,259				
Newly approved	270	366	310	460	269	364	308	454
Canceled	36	58	– 15	23	36	58	– 15	23
Capital expenditure	261	293	324	285	260	291	322	281
Closing backlog	1,243	1,258	1,259	1,411				

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant Dollars			
	II-85	III-85	IV-85r	I-86p	II-85r	III-85r	IV-85r	I-86p
Instruments & photo equipment								
Opening backlog	1,834	1,815	1,767	1,847				
Newly approved	958	984	1,067	941	955	979	1,058	926
Canceled	53	99	109	85	53	98	108	84
Capital expenditure	924	933	878	941	921	928	871	926
Closing backlog	1,815	1,767	1,847	1,762				
Other durable goods†								
Opening backlog	2,381	2,031	2,552	2,269				
Newly approved	419	1,228	533	686	417	1,207	529	662
Canceled	15	33	4	50	15	32	4	48
Capital expenditure	754	674	812	633	751	662	807	611
Closing backlog	2,031	2,552	2,269	2,272				
NONDURABLE GOODS								
Opening backlog	50,886	53,930	52,322	52,791				
Newly approved	16,650	12,136	15,185	11,853	16,629	12,043	15,063	11,629
Canceled	1,509	1,313	1,056	705	1,507	1,305	1,045	692
Capital expenditure	12,097	12,431	13,660	12,203	12,080	12,338	13,553	11,973
Closing backlog	53,930	52,322	52,791	51,736				
Food & beverages								
Opening backlog	5,531	5,423	5,948	6,183				
Newly approved	1,837	2,057	2,200	2,658	1,829	2,039	2,175	2,613
Canceled	291	47	114	134	290	47	113	132
Capital expenditure	1,654	1,485	1,851	1,691	1,647	1,472	1,830	1,662
Closing backlog	5,423	5,948	6,183	7,016				
Textiles								
Opening backlog	535	513	413	440				
Newly approved	238	100	170	248	238	100	168	245
Canceled	68	22	10	0	68	22	10	0
Capital expenditure	192	178	133	167	192	177	132	165
Closing backlog	513	413	440	521				
Paper & allied products								
Opening backlog	5,715	5,235	4,647	4,675				
Newly approved	731	887	658	326	732	885	655	322
Canceled	331	418	−505	50	331	417	−503	49
Capital expenditure	880	1,057	1,135	902	881	1,055	1,130	892
Closing backlog	5,235	4,647	4,675	4,049				
Chemicals & allied products								
Opening backlog	8,506	8,433	8,014	7,894				
Newly approved	3,046	2,221	2,847	2,867	3,041	2,205	2,830	2,823
Canceled	319	−36	373	114	318	−36	371	112
Capital expenditure	2,800	2,676	2,594	2,661	2,795	2,656	2,578	2,621
Closing backlog	8,433	8,014	7,894	7,986				
Petroleum and coal products								
Opening backlog	24,651	26,977	25,986	25,873				
Newly approved	8,362	5,638	6,204	4,653	8,358	5,592	6,150	4,548
Canceled	595	877	1,004	716	595	870	995	700
Capital expenditure	5,441	5,752	5,313	5,079	5,438	5,706	5,267	4,965
Closing backlog	26,977	25,986	25,873	24,731				
Rubber products								
Opening backlog	1,653	3,117	2,935	3,107				
Newly approved	1,829	379	2,144	475	1,827	377	2,131	468
Canceled	−128	−15	32	−4	−128	−15	32	−4
Capital expenditure	493	576	1,940	971	492	573	1,928	956
Closing backlog	3,117	2,935	3,107	2,615				
Other nondurable goods†								
Opening backlog	4,295	4,232	4,379	4,619				
Newly approved	607	854	962	626	604	845	953	610
Canceled	33	0	28	−305	33	0	28	−297
Capital expenditure	637	707	694	732	634	700	687	713
Closing backlog	4,232	4,379	4,619	4,818				

See General Notes on page 5

TABLE 2. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	II-85 to III-85	III-85 to IV-85	IV-85 to I-86	I-85 to I-86	II-85 to III-85	III-85 to IV-85	IV-85 to I-86	I-85 to I-86
				—APPROPRIATIONS—				
ALL MANUFACTURING	-12.3	12.5	- 9.9	-18.2	-12.9	12.3	-10.6	-19.4
ALL MFG. EX PETROLEUM	- 3.5	13.3	- 5.4	-18.4	- 4.1	13.0	- 6.0	-19.5
DURABLE GOODS	10.3	- 0.2	5.4	-24.4	9.6	- 0.6	5.0	-25.5
Primary iron & steel	- 4.5	-71.4	451.4	113.2	- 5.1	-71.4	448.2	110.4
Primary nonferrous metals	85.3	50.8	-20.0	30.6	84.8	50.7	-20.8	28.5
Electrical machinery & equipment	- 6.9	- 4.7	-30.8	-17.1	- 7.2	- 4.8	-31.3	-18.3
Nonelectrical machinery	4.1	- 1.9	- 2.3	-40.0	3.2	- 3.2	- 1.6	-40.8
Motor vehicles & equipment	- 3.1	98.9	- 1.5	-48.5	- 3.6	98.3	- 1.9	-49.1
Other transportation equipment	11.3	- 7.0	38.6	2.2	11.0	- 8.1	38.6	0.8
Stone, clay & glass	4.5	-36.0	- 4.6	-23.7	3.6	-35.8	- 5.4	-24.6
Fabricated metals	35.6	-15.3	48.4	22.7	35.2	-15.4	47.3	21.1
Instruments & photo equipment	2.7	8.4	-11.8	- 5.8	2.5	8.1	-12.5	- 7.0
Other durable goods†	193.1	-56.6	28.7	15.5	189.1	-56.1	25.1	11.8
NONDURABLE GOODS	-27.1	25.1	-21.9	-10.2	-27.6	25.1	-22.8	-11.6
Food & beverages	12.0	7.0	20.8	30.0	11.4	6.7	20.1	28.3
Textiles	-58.0	70.0	45.9	11.7	-58.1	69.1	45.3	10.4
Paper & allied products	21.3	-25.8	-50.5	-64.7	20.9	-26.0	-50.8	-65.2
Chemicals & allied products	-27.1	28.2	0.7	-16.0	-27.5	28.3	- 0.2	-17.1
Petroleum & coal products	-32.6	10.0	-25.0	-17.2	-33.1	10.0	-26.0	-18.7
Rubber products	-79.3	465.7	-77.8	21.2	-79.4	465.2	-78.1	19.7
Other nondurable goods†	40.7	12.6	-34.9	7.0	39.8	12.7	-36.0	4.5
				—EXPENDITURES—				
ALL MANUFACTURING	- 0.7	6.5	- 9.2	2.4	- 1.3	6.2	- 9.9	0.8
ALL MFG. EX PETROLEUM	- 2.5	10.8	-10.4	4.6	- 3.0	10.5	-10.9	3.1
DURABLE GOODS	- 4.0	3.1	- 7.5	0.6	- 4.6	2.6	- 7.9	- 0.8
Primary iron & steel	-36.1	47.5	-13.6	18.9	-36.5	47.2	-14.1	17.4
Primary nonferrous metals	11.9	1.7	8.8	21.5	11.6	1.7	7.7	19.6
Electrical machinery & equipment	-19.0	- 5.9	-22.1	-28.6	-19.2	- 6.1	-22.7	-29.6
Nonelectrical machinery	-17.6	5.6	-28.8	-31.4	-18.3	4.2	-28.3	-32.4
Motor vehicles & equipment	32.4	5.3	6.0	81.2	31.7	4.9	5.6	79.1
Other transportation equipment	9.9	- 9.3	23.9	4.8	9.5	-10.4	24.0	3.3
Stone, clay & glass	- 9.5	- 2.4	- 6.5	-17.6	-10.3	- 2.2	- 7.3	-18.6
Fabricated metals	12.3	10.6	-12.0	7.5	11.9	10.5	-12.7	6.0
Instruments & photo equipment	1.0	- 5.9	7.2	-10.5	0.8	- 6.2	6.4	-11.6
Other durable goods†	-10.6	20.5	-22.0	1.0	-11.8	21.8	-24.2	- 2.2
NONDURABLE GOODS	2.8	9.9	-10.7	4.2	2.1	9.8	-11.7	2.4
Food & beverages	-10.2	24.6	- 8.6	9.4	-10.6	24.4	- 9.2	8.1
Textiles	- 7.3	-25.3	25.6	-31.6	- 7.6	-25.7	25.0	-32.4
Paper & allied products	20.1	7.4	-20.5	2.6	19.7	7.2	-21.1	1.5
Chemicals & allied products	- 4.4	- 3.1	2.6	4.8	- 5.0	- 2.9	1.6	3.4
Petroleum & coal products	5.7	- 7.6	- 4.4	- 5.2	4.9	- 7.7	- 5.7	- 7.0
Rubber products	16.8	236.8	-49.9	140.9	16.4	236.5	-50.4	122.8
Other nondurable goods†	11.0	- 1.8	5.5	- 0.4	10.3	- 1.8	3.8	- 2.7

TABLE 3. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS

In Millions of Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	1982	1983	1984	1985(r)	1982(r)	1983(r)	1984(r)	1985(r)
				—APPROPRIATIONS—				
ALL MANUFACTURING	87,544	88,180	116,056	107,142	87,741	88,804	116,709	106,570
ALL MFG. EX PETROLEUM	56,020	62,462	90,598	82,473	56,068	62,882	91,088	82,029
DURABLE GOODS	32,031	37,537	59,618	51,657	32,053	37,790	59,933	51,354
Primary iron & steel	1,563	2,113	2,125	2,001	1,570	2,123	2,135	2,001
Primary nonferrous metals	1,082	1,164	1,363	1,237	1,086	1,175	1,371	1,233
Electrical machinery & equipment	6,663	8,869	11,987	8,254	6,665	8,945	12,042	8,206
Nonelectrical machinery	8,710	7,909	10,854	11,408	8,714	7,964	10,907	11,311
Motor vehicles & equipment	3,915	5,807	16,686	11,711	3,900	5,856	16,789	11,650
Other transportation equipment	3,225	3,601	5,059	6,200	3,237	3,617	5,089	6,162
Stone, clay & glass	1,562	1,625	2,767	2,945	1,561	1,634	2,781	2,935
Fabricated metals	1,022	960	1,221	1,342	1,024	964	1,226	1,338
Instruments & photo equipment	3,372	3,614	4,859	4,015	3,377	3,632	4,881	3,994
Other durable goods†	917	1,875	2,697	2,544	918	1,881	2,711	2,524
NONDURABLE GOODS	55,513	50,643	56,438	55,485	55,688	51,014	56,776	55,215
Food & beverages	5,792	5,909	6,993	8,127	5,792	5,957	7,035	8,072
Textiles	1,028	1,194	1,104	718	1,026	1,201	1,111	716
Paper & allied products	4,006	3,231	5,936	3,269	4,038	3,237	5,967	3,266
Chemicals & allied products	9,476	10,002	11,831	11,479	9,469	10,080	11,888	11,432
Petroleum & coal products	31,524	25,718	25,458	24,669	31,672	25,922	25,620	24,540
Rubber products	776	965	1,616	4,306	777	968	1,631	4,293
Other nondurable goods†	2,911	3,624	3,500	2,917	2,913	3,648	3,524	2,897
				—EXPENDITURES—				
ALL MANUFACTURING	98,614	75,710	90,308	99,569	98,595	76,319	78,957	98,987
ALL MFG. EX PETROLEUM	65,297	55,269	68,676	77,706	65,240	55,671	60,367	77,246
DURABLE GOODS	39,945	32,254	42,865	49,498	39,914	32,492	37,545	49,177
Primary iron & steel	3,545	2,136	1,984	2,591	3,544	2,145	1,750	2,588
Primary nonferrous metals	1,574	1,207	1,385	1,339	1,575	1,219	1,221	1,334
Electrical machinery & equipment	6,354	6,964	10,100	9,075	6,340	7,027	8,906	9,020
Nonelectrical machinery	10,906	7,768	8,648	10,215	10,900	7,826	7,543	10,114
Motor vehicles & equipment	5,610	4,007	6,991	10,435	5,609	4,039	6,176	10,374
Other transportation equipment	3,156	3,179	4,338	5,133	3,150	3,204	3,697	5,093
Stone, clay & glass	1,726	1,666	2,083	2,897	1,724	1,675	1,845	2,888
Fabricated metals	1,513	871	1,025	1,155	1,512	875	903	1,151
Instruments & photo equipment	3,827	3,145	4,202	3,763	3,823	3,163	3,688	3,744
Other durable goods†	1,734	1,311	2,109	2,895	1,735	1,319	1,814	2,873
NONDURABLE GOODS	58,669	43,456	47,443	50,071	58,681	43,827	41,412	49,810
Food & beverages	5,802	5,426	5,374	6,552	5,801	5,471	4,675	6,506
Textiles	1,044	975	1,164	743	1,043	980	1,025	741
Paper & allied products	3,653	3,357	3,842	4,001	3,647	3,372	3,460	3,994
Chemicals & allied products	11,180	9,340	11,211	10,619	11,166	9,409	9,931	10,571
Petroleum & coal products	33,317	20,441	21,632	21,863	33,355	20,648	18,590	21,741
Rubber products	704	889	1,216	3,531	703	894	1,075	3,514
Other nondurable goods†	2,969	3,028	3,004	2,762	2,967	3,053	2,655	2,743

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1985-IV are revised; data for 1986–I are preliminary. All Constant dollar data have been revised to 1982 dollars. Please note: We have stopped publishing constant dollar backlog data pending a review of the method used to calculate them.

Amounts shown as "canceled" in Table 2 also include adjustments and corrections to appropriations backlogs, such as cost over- or under-runs.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for approximately 75% of all manufacturing corporations' assets in 1979.

Historical data from 1953 available on request for quarterly series seasonally adjusted and quarterly series not seasonally adjusted.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

TABLE 4. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986	Apr. 1986
					Inadequate					
All Manufacturing	9.6	10.2	8.2	10.0	11.0	10.9	9.1	9.1	9.4	8.5
Durable goods	18.3	18.1	14.2	16.8	15.7	17.4	17.3	17.5	16.8	14.3
Nondurable goods	2.6	3.7	3.2	4.3	6.4	5.3	2.4	2.7	2.7	2.7
					Sufficient					
All Manufacturing	52.9	54.3	55.3	54.4	52.9	50.2	52.7	52.0	52.9	51.1
Durable goods	47.5	49.0	49.0	50.3	53.1	54.4	53.5	48.2	47.5	52.7
Nondurable goods	57.2	58.6	60.5	57.8	52.7	46.5	52.1	54.9	57.8	49.5
					More Than Adequate					
All Manufacturing	37.5	35.5	36.5	35.6	36.1	38.9	38.2	38.9	37.7	40.4
Durable goods	34.2	32.9	36.8	32.9	31.2	28.2	29.2	34.3	35.7	33.0
Nondurable goods	40.2	37.7	36.3	37.9	40.9	48.2	45.5	42.4	39.5	47.8

TABLE 5. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Jan. 1984	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986	Apr. 1986
					Expansion					
All Manufacturing	46.1	49.2	49.7	52.7	51.4	50.9	49.5	45.6	39.4	42.9
Durable goods	45.2	49.0	51.6	58.8	59.0	60.2	52.4	50.3	45.9	41.8
Nondurable goods	46.9	49.4	48.1	47.6	43.9	42.6	47.1	42.0	33.6	43.9
					No Change					
All Manufacturing	48.3	48.2	46.1	44.8	46.9	42.3	47.3	49.1	55.4	51.0
Durable goods	42.6	45.6	39.2	36.4	37.8	32.9	41.5	40.8	45.7	47.7
Nondurable goods	52.8	50.3	51.9	51.9	56.0	50.7	52.1	55.5	64.2	54.2
					Reduction					
All Manufacturing	5.6	2.6	4.2	2.5	1.7	6.8	3.2	5.3	5.2	6.1
Durable goods	12.2	5.4	9.2	4.8	3.3	6.9	6.1	8.9	8.4	10.5
Nondurable goods	0.3	0.3	0.0	0.6	0.1	6.7	0.8	2.5	2.2	1.9

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Manufacturing Investment Statistics

Capital Appropriations

Second Quarter 1986

and

Capital Investment and Supply Conditions

July 1986

The Conference Board
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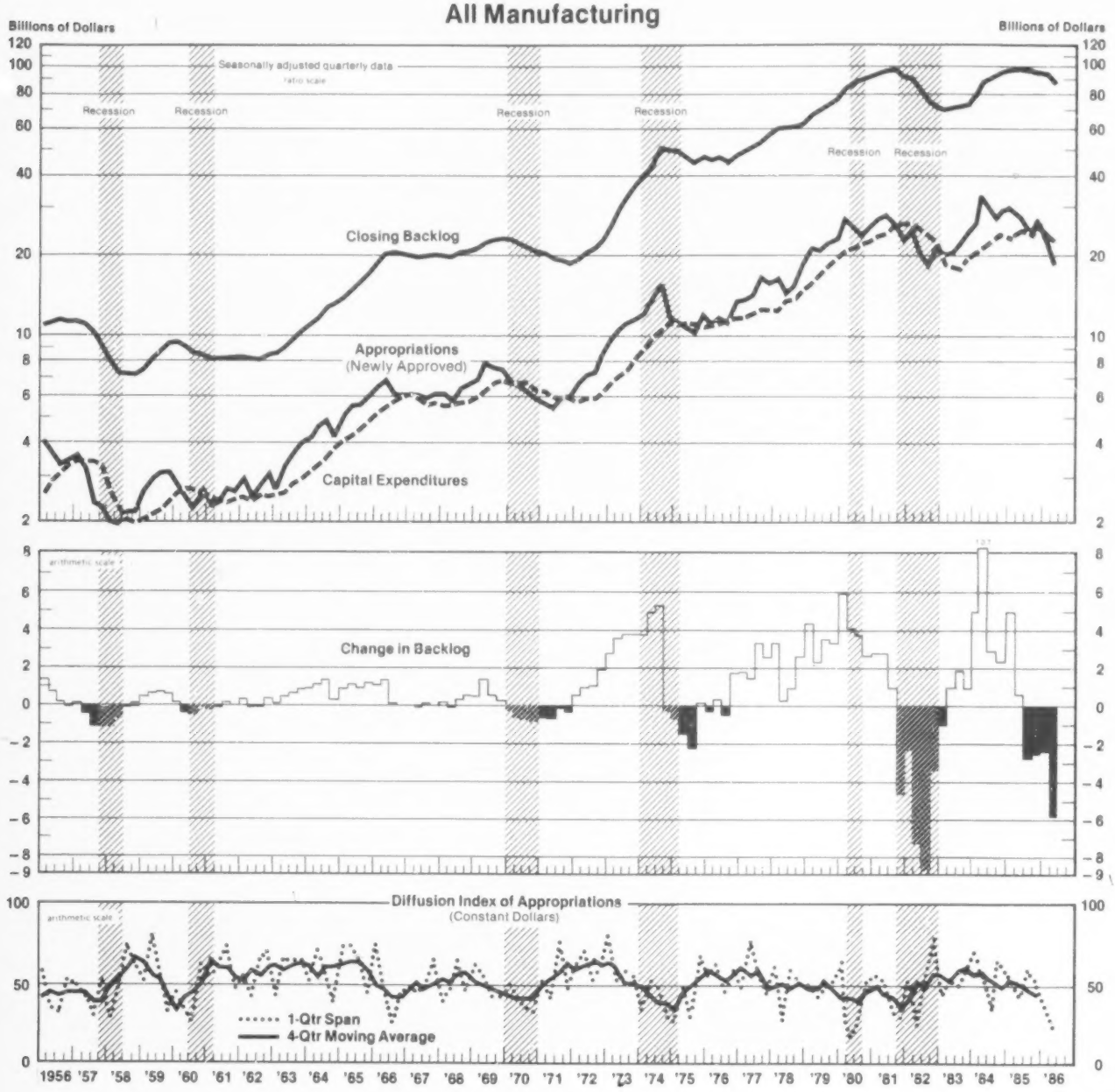
CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION



Surveys conducted by Walter Arvin

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The Second Quarter Survey of Capital Appropriations

Highlights

- Capital expenditures decline by 3.9% from previous quarter
- Appropriations fall sharply for second straight quarter
- Closing backlog of unspent appropriations continues to decline
- Capital spending expected to continue to decline in second half, with 1986 totals lower than in 1985.

Capital Expenditures

Capital spending by the 1,000 largest U.S. manufacturers fell again for the second straight quarter to $22.6 billion. The second quarter expenditure decline of 3.9% was mostly attributable to a reduction in spending by the petroleum industry, which lowered its spending by 28.5 percent. In fact, excluding the petroleum industry, capital spending by manufacturers rose 2.5% from the January-March quarter. Much of the second-quarter spending has come from unspent backlogs, which suggests that for the next few quarters spending will be flat or slightly lower.

The increase in capital spending by manufacturers (excluding the petroleum sector) may be a result of the pending tax reform legislation, which would repeal many of the investment incentives of the current tax laws. As a result, many firms may not wait to spend.

The dramatic decrease in spending in the petroleum industry is a direct result of the fall in domestic oil prices from a 1985 average price of $24 a barrel to below $11 in the second quarter. With the stabilization of oil prices at or above current levels, we may see a pick up in spending by this sector.

Capital Appropriations

Newly approved capital appropriations for future spending on plant and equipment fell sharply for the second straight quarter—to $18.8 billion, or down 19.7 percent from last quarter. Appropriations for the first half of this year are running 26.7% below the first half level of 1985. Since 13 of the 17 industries surveyed reduced appropriations by more than 10%, the second-quarter decline in appropriations can not be attributed to any one industry. Two bright spots were the paper products and stone, clay & glass industries, each posting increases of more than 50 percent.

The large decline in appropriations can be attributed to the continued slow growth in the manufacturing sector where, according to Federal Reserve Board data, output for the second quarter increased by a mere 1.7% from the second quarter of 1985. During that same period, capacity utilization dipped below 80% to 79.5%, the lowest since the fourth quarter of 1983. As a result of the increasing excess capacity, a majority of our survey respondents do not expect their current spending programs to lead to an expansion of their capital facilities (Tables 4 & 5).

The Spending Outlook

The fact that a large percentage of recent spending has come from unspent backlogs means that expenditures have been in excess of appropriations. This development, now in its second quarter, signals a decline or flattening of capital spending for the next few quarters. The dramatic decline in appropriations during the first half of 1986 also signals a drop in spending for the second half of this year. With these two leading indicators of spending both declining, spending for all of 1986 can be expected to run below 1985 levels.

Increased capital spending is likely in the stone, clay & glass, electrical & nonelectrical machinery, and paper products industries. Again the petroleum industry will play a major role in the overall investment picture since it accounts for nearly 20% of total manufacturing investment. As stated above, the stabilization of oil prices around their current levels may preclude a repeat of the second-quarter investment activity for this industry.

Walter Arvin

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Millions of Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	III-85	IV-85	I-86(r)	II-86(p)	III-85	IV-85	I-86(r)	II-86(p)
ALL MANUFACTURING								
Opening backlog	99,880	97,178	94,584	92,216				
Newly approved	24,167	27,190	23,386	18,773	23,975	26,918	23,504	18,926
Canceled	2,139	3,448	2,188	1,970	2,125	3,407	2,206	1,990
Capital expenditure	24,730	26,336	23,566	22,648	24,544	26,077	23,691	22,824
Closing backlog	97,178	94,584	92,216	86,371				
DURABLE GOODS								
Opening backlog	45,950	44,856	41,793	40,211				
Newly approved	12,031	12,005	11,613	9,593	11,933	11,855	11,682	9,677
Canceled	826	2,392	1,716	1,425	820	2,361	1,728	1,440
Capital expenditure	12,299	12,676	11,479	11,602	12,206	12,524	11,548	11,696
Closing backlog	44,856	41,793	40,211	36,777				
Primary iron & steel								
Opening backlog	1,783	1,752	1,092	1,490				
Newly approved	632	181	1,082	109	630	180	1,098	111
Canceled	164	105	6	379	163	104	6	386
Capital expenditure	499	736	678	341	497	732	688	347
Closing backlog	1,752	1,092	1,490	879				
Primary nonferrous metals								
Opening backlog	2,374	2,334	2,194	2,044				
Newly approved	315	475	415	242	314	473	418	242
Canceled	7	261	126	94	7	260	127	94
Capital expenditure	348	354	439	458	346	352	442	458
Closing backlog	2,334	2,194	2,044	1,734				
Electrical machinery & equipment								
Opening backlog	5,653	5,431	4,864	4,700				
Newly approved	2,167	2,066	1,637	2,127	2,151	2,047	1,645	2,149
Canceled	203	576	93	243	202	571	93	245
Capital expenditure	2,186	2,057	1,708	1,883	2,170	2,039	1,717	1,902
Closing backlog	5,431	4,864	4,700	4,701				
Nonelectrical machinery								
Opening backlog	7,754	7,745	7,129	7,297				
Newly approved	2,523	2,474	2,243	1,758	2,497	2,416	2,257	1,781
Canceled	190	617	536	80	188	602	539	81
Capital expenditure	2,342	2,473	1,539	1,590	2,318	2,415	1,549	1,610
Closing backlog	7,745	7,129	7,297	7,385				
Motor vehicles & equipment								
Opening backlog	17,292	15,776	15,181	13,614				
Newly approved	1,514	3,012	2,386	1,560	1,505	2,983	2,411	1,576
Canceled	29	448	776	476	29	444	784	481
Capital expenditure	3,001	3,159	3,177	3,402	2,982	3,129	3,210	3,437
Closing backlog	15,776	15,181	13,614	11,296				
Other transportation equipment								
Opening backlog	3,892	4,014	3,941	3,802				
Newly approved	1,427	1,327	1,309	1,404	1,419	1,304	1,315	1,428
Canceled	−22	196	−4	43	−22	193	−4	44
Capital expenditure	1,327	1,204	1,452	1,566	1,319	1,183	1,459	1,593
Closing backlog	4,014	3,941	3,802	3,597				
Stone, clay & glass								
Opening backlog	2,113	2,227	2,017	1,804				
Newly approved	875	560	484	739	868	557	490	723
Canceled	65	91	89	−13	65	91	90	−13
Capital expenditure	696	679	608	575	691	676	615	586
Closing backlog	2,227	2,017	1,804	1,981				
Fabricated metals								
Opening backlog	1,243	1,258	1,259	1,357				
Newly approved	366	310	447	358	364	308	452	365
Canceled	58	−15	28	33	58	−15	28	34
Capital expenditure	293	324	321	353	291	322	325	360
Closing backlog	1,258	1,259	1,357	1,329				

TABLE 1. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant Dollars			
	III-85	IV-85	I-86(r)	II-86(p)	III-85	IV-85	I-86(r)	II-86(p)
Instruments & photo equipment								
Opening backlog	1,815	1,767	1,847	1,880				
Newly approved	984	1,067	956	844	979	1,058	961	841
Canceled	99	109	20	53	98	108	20	53
Capital expenditure	933	878	903	818	928	871	908	815
Closing backlog	1,767	1,847	1,880	1,853				
Other durable goods†								
Opening backlog	2,031	2,552	2,269	2,223				
Newly approved	1,228	533	654	452	1,207	529	634	431
Canceled	33	4	46	37	32	4	45	35
Capital expenditure	674	812	654	616	662	807	634	588
Closing backlog	2,552	2,269	2,223	2,022				
NONDURABLE GOODS								
Opening backlog	53,930	52,322	52,791	52,005				
Newly approved	12,136	15,185	11,773	9,180	12,043	15,063	11,821	9,249
Canceled	1,313	1,056	472	545	1,305	1,045	478	550
Capital expenditure	12,431	13,660	12,087	11,046	12,338	13,553	12,142	11,128
Closing backlog	52,322	52,791	52,005	49,594				
Food & beverages								
Opening backlog	5,423	5,948	6,183	6,660				
Newly approved	2,057	2,200	2,348	1,698	2,039	2,175	2,355	1,697
Canceled	47	114	258	72	47	113	259	78
Capital expenditure	1,485	1,851	1,613	1,929	1,472	1,830	1,618	1,928
Closing backlog	5,948	6,183	6,660	6,351				
Textiles								
Opening backlog	513	413	440	453				
Newly approved	100	170	212	150	100	168	215	152
Canceled	22	10	45	2	22	10	46	2
Capital expenditure	178	133	154	162	177	132	156	165
Closing backlog	413	440	453	439				
Paper & allied products								
Opening backlog	5,235	4,647	4,675	4,111				
Newly approved	887	658	528	1,130	885	655	535	1,154
Canceled	418	−505	79	90	417	−503	80	92
Capital expenditure	1,057	1,135	1,013	1,256	1,055	1,130	1,027	1,282
Closing backlog	4,647	4,675	4,111	3,895				
Chemicals & allied products								
Opening backlog	8,433	8,014	7,894	7,898				
Newly approved	2,221	2,847	2,797	2,422	2,205	2,830	2,818	2,440
Canceled	−36	373	83	149	−36	371	84	150
Capital expenditure	2,676	2,594	2,710	2,588	2,656	2,578	2,730	2,607
Closing backlog	8,014	7,894	7,898	7,583				
Petroleum and coal products								
Opening backlog	26,977	25,986	25,873	25,198				
Newly approved	5,638	6,204	4,435	2,950	5,592	6,150	4,448	2,977
Canceled	877	1,004	232	216	870	995	233	218
Capital expenditure	5,752	5,313	4,878	3,486	5,706	5,267	4,892	3,518
Closing backlog	25,986	25,873	25,198	24,446				
Rubber products								
Opening backlog	3,117	2,935	3,107	2,719				
Newly approved	379	2,144	543	178	377	2,131	546	180
Canceled	−15	32	−2	−17	−15	32	−2	−17
Capital expenditure	576	1,940	933	777	573	1,928	939	784
Closing backlog	2,935	3,107	2,719	2,137				
Other nondurable goods†								
Opening backlog	4,232	4,379	4,619	4,966				
Newly approved	854	962	910	652	845	953	904	649
Canceled	0	28	−223	27	0	28	−222	27
Capital expenditure	707	694	786	848	700	687	781	844
Closing backlog	4,379	4,619	4,966	4,743				

See General Notes on page 8.

TABLE 2. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Data in Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	III-85 to IV-85	IV-85 to I-86	I-86 to II-86	II-85 to II-86	III-85 to IV-85	IV-85 to I-86	I-86 to II-86	II-85 to II-86
				—APPROPRIATIONS—				
ALL MANUFACTURING	12.5	−14.0	−19.7	−37.3	12.3	−12.7	−19.5	−31.2
ALL MFG. EX PETROLEUM	13.3	− 9.7	−16.5	−17.6	13.0	− 8.2	−16.3	−16.8
DURABLE GOODS	− 0.2	− 3.3	−17.4	−42.7	− 0.6	− 1.5	−17.2	−11.1
Primary iron & steel	−71.4	497.8	−89.9	−76.7	−71.4	509.9	−89.9	−83.3
Primary nonferrous metals	50.8	−12.6	−41.7	−16.8	50.7	−11.6	−42.0	42.4
Electrical machinery & equipment	− 4.7	−20.8	29.9	23.4	− 4.8	19.6	30.6	− 7.3
Nonelectrical machinery	− 1.9	− 9.3	−21.6	−56.3	− 3.2	− 6.6	−21.1	−26.4
Motor vehicles & equipment	98.9	−20.8	−34.6	−72.9	98.3	−19.2	−34.6	1.0
Other transportation equipment	− 7.0	− 1.4	7.3	−22.0	− 8.1	0.9	8.6	11.7
Stone, clay & glass	−36.0	−13.6	52.7	5.6	−35.8	−12.1	53.8	−10.1
Fabricated metals	−15.3	44.2	−19.9	− 4.5	−15.4	46.6	−19.2	35.7
Instruments & photo equipment	8.4	−10.4	−11.7	−15.5	8.1	− 9.1	−12.5	−11.9
Other durable goods†	−56.6	22.7	−30.9	−23.9	−56.1	19.8	−32.0	3.4
NONDURABLE GOODS	25.1	−22.5	−22.0	−30.5	25.1	−21.5	−21.8	−44.4
Food & beverages	7.0	6.7	−27.7	−17.0	6.7	8.2	−27.9	− 7.2
Textiles	70.0	24.7	−29.2	−32.4	69.1	27.4	−29.0	−36.1
Paper & allied products	−25.8	−19.8	114.0	22.3	−26.0	−18.3	115.7	57.7
Chemicals & allied products	28.2	− 1.8	−13.4	−29.1	28.3	− 0.4	−13.4	−19.8
Petroleum & coal products	10.0	−28.5	−33.5	−47.5	10.0	−27.7	−33.1	−64.4
Rubber products	465.7	−74.7	−67.2	−54.6	465.2	−74.4	−67.1	−90.1
Other nondurable goods†	12.6	− 5.4	−28.4	11.5	12.7	− 5.1	−28.2	7.5
				—EXPENDITURES—				
ALL MANUFACTURING	6.5	−10.5	− 3.9	− 3.0	6.2	− 9.2	−3.6	− 8.2
ALL MFG. EX PETROLEUM	10.8	−11.1	2.5	− 1.6	10.5	− 9.7	2.7	− 0.6
DURABLE GOODS	3.1	− 9.4	1.1	− 0.4	2.6	− 7.8	1.3	− 8.5
Primary iron & steel	47.5	− 7.9	−49.7	−36.3	47.2	− 6.0	−49.6	−55.7
Primary nonferrous metals	1.7	24.0	4.3	44.5	1.7	25.5	3.7	47.7
Electrical machinery & equipment	− 5.9	−17.0	10.2	−16.1	− 6.1	−15.8	10.8	−29.2
Nonelectrical machinery	5.6	−37.8	3.3	−38.0	4.2	−35.9	4.0	−43.3
Motor vehicles & equipment	5.3	0.6	7.1	84.1	4.9	2.6	7.1	51.8
Other transportation equipment	− 9.3	20.6	7.9	10.0	−10.4	23.3	9.2	32.3
Stone, clay & glass	− 2.4	−10.5	− 5.4	−25.4	− 2.2	− 8.9	− 4.8	−23.9
Fabricated metals	10.6	− 0.9	10.0	33.2	10.5	0.7	11.0	38.5
Instruments & photo equipment	− 5.9	2.8	− 9.4	−22.2	− 6.2	4.3	−10.2	−11.5
Other durable goods†	20.5	−19.5	− 5.8	− 1.8	21.8	−21.4	− 7.3	−21.7
NONDURABLE GOODS	9.9	−11.5	− 8.6	− 5.6	9.8	−10.4	− 8.3	− 7.9
Food & beverages	24.6	−12.9	19.6	24.9	24.4	−11.6	19.2	17.1
Textiles	−25.3	15.8	5.2	−33.6	−25.7	18.3	5.6	−14.1
Paper & allied products	7.4	−10.7	24.0	42.9	7.2	− 9.2	24.9	45.5
Chemicals & allied products	− 3.1	4.5	− 4.5	1.9	− 2.9	5.9	− 4.5	− 6.7
Petroleum & coal products	− 7.6	− 8.2	−28.5	−35.0	− 7.7	− 7.1	−28.1	−35.3
Rubber products	236.8	−51.9	−16.7	92.8	236.5	−51.3	−16.5	59.3
Other nondurable goods†	− 1.8	13.3	7.9	15.4	− 1.8	13.6	8.1	33.1

TABLE 3. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS

In Millions of Current and Constant (1982) Dollars

	Current Dollars				Constant Dollars			
	1982	1983	1984	1985	1982	1983	1984	1985
				—APPROPRIATIONS—				
ALL MANUFACTURING	87,544	88,180	116,056	107,142	87,741	88,804	116,709	106,570
ALL MFG. EX PETROLEUM	56,020	62,462	90,598	82,473	56,068	62,882	91,088	82,029
DURABLE GOODS	32,031	37,537	59,618	51,657	32,053	37,790	59,933	51,354
Primary iron & steel	1,563	2,113	2,125	2,001	1,570	2,123	2,135	2,001
Primary nonferrous metals	1,082	1,164	1,363	1,237	1,086	1,175	1,371	1,233
Electrical machinery & equipment	6,663	8,869	11,987	8,254	6,665	8,945	12,042	8,206
Nonelectrical machinery	8,710	7,909	10,854	11,408	8,714	7,964	10,907	11,311
Motor vehicles & equipment	3,915	5,807	16,686	11,711	3,900	5,856	16,789	11,650
Other transportation equipment	3,225	3,601	5,059	6,200	3,237	3,617	5,089	6,162
Stone, clay & glass	1,562	1,625	2,767	2,945	1,561	1,634	2,781	2,935
Fabricated metals	1,022	960	1,221	1,342	1,024	964	1,226	1,338
Instruments & photo equipment	3,372	3,614	4,859	4,015	3,377	3,632	4,881	3,994
Other durable goods†	917	1,875	2,697	2,544	918	1,881	2,711	2,524
NONDURABLE GOODS	55,513	50,643	56,438	55,485	55,688	51,014	56,776	55,215
Food & beverages	5,792	5,909	6,993	8,127	5,792	5,957	7,035	8,072
Textiles	1,028	1,194	1,104	718	1,026	1,201	1,111	716
Paper & allied products	4,006	3,231	5,936	3,269	4,038	3,237	5,967	3,266
Chemicals & allied products	9,476	10,002	11,831	11,479	9,469	10,080	11,888	11,432
Petroleum & coal products	31,524	25,718	25,458	24,669	31,672	25,922	25,620	24,540
Rubber products	776	965	1,616	4,306	777	968	1,631	4,293
Other nondurable goods†	2,911	3,624	3,500	2,917	2,913	3,648	3,524	2,897
				—EXPENDITURES—				
ALL MANUFACTURING	98,614	75,710	90,308	99,569	98,595	76,319	78,957	98,987
ALL MFG. EX PETROLEUM	65,297	55,269	68,676	77,706	65,240	55,671	60,367	77,246
DURABLE GOODS	39,945	32,254	42,865	49,498	39,914	32,492	37,545	49,177
Primary iron & steel	3,545	2,136	1,984	2,591	3,544	2,145	1,750	2,588
Primary nonferrous metals	1,574	1,207	1,385	1,339	1,575	1,219	1,221	1,334
Electrical machinery & equipment	6,354	6,964	10,100	9,075	6,340	7,027	8,906	9,020
Nonelectrical machinery	10,906	7,768	8,648	10,215	10,900	7,826	7,543	10,114
Motor vehicles & equipment	5,610	4,007	6,991	10,435	5,609	4,039	6,176	10,374
Other transportation equipment	3,156	3,179	4,338	5,133	3,150	3,204	3,697	5,093
Stone, clay & glass	1,726	1,666	2,083	2,897	1,724	1,675	1,845	2,888
Fabricated metals	1,513	871	1,025	1,155	1,512	875	903	1,151
Instruments & photo equipment	3,827	3,145	4,202	3,763	3,823	3,163	3,688	3,744
Other durable goods†	1,734	1,311	2,109	2,895	1,735	1,319	1,814	2,873
NONDURABLE GOODS	58,669	43,456	47,443	50,071	58,681	43,827	41,412	49,810
Food & beverages	5,802	5,426	5,374	6,552	5,801	5,471	4,675	6,506
Textiles	1,044	975	1,164	743	1,043	980	1,025	741
Paper & allied products	3,653	3,357	3,842	4,001	3,647	3,372	3,460	3,994
Chemicals & allied products	11,180	9,340	11,211	10,619	11,166	9,409	9,931	10,571
Petroleum & coal products	33,317	20,441	21,632	21,863	33,355	20,648	18,590	21,741
Rubber products	704	889	1,216	3,531	703	894	1,075	3,514
Other nondurable goods†	2,969	3,028	3,004	2,762	2,967	3,053	2,655	2,743

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1986-I are revised; data for 1986-II are preliminary. All Constant dollar data have been revised to 1982 dollars. Please note: We have stopped publishing constant dollar backlog data pending a review of the method used to calculate them.

Amounts shown as "canceled" in Table 2 also include adjustments and corrections to appropriations backlogs, such as cost over- or under-runs.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for approximately 75% of all manufacturing corporations' assets in 1979.

Historical data from 1953 available on request for quarterly series seasonally adjusted and quarterly series not seasonally adjusted.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

TABLE 4. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986	Apr. 1986	July 1986
					Inadequate					
All Manufacturing	10.2	8.2	10.0	11.0	10.9	9.1	9.1	9.4	8.5	7.9
Durable goods	18.1	14.2	16.8	15.7	17.4	17.3	17.5	16.8	14.3	13.4
Nondurable goods	3.7	3.2	4.3	6.4	5.3	2.4	2.7	2.7	2.7	2.9
					Sufficient					
All Manufacturing	54.3	55.3	54.4	52.9	50.2	52.7	52.0	52.9	51.1	58.5
Durable goods	49.0	49.0	50.3	53.1	54.4	53.5	48.2	47.5	52.7	54.7
Nondurable goods	58.6	60.5	57.8	52.7	46.5	52.1	54.9	57.8	49.5	61.9
					More Than Adequate					
All Manufacturing	35.5	36.5	35.6	36.1	38.9	38.2	38.9	37.7	40.4	33.6
Durable goods	32.9	36.8	32.9	31.2	28.2	29.2	34.3	35.7	33.0	31.9
Nondurable goods	37.7	36.3	37.9	40.9	48.2	45.5	42.4	39.5	47.8	35.2

TABLE 5. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1984	July 1984	Oct. 1984	Jan. 1985	Apr. 1985	July 1985	Oct. 1985	Jan. 1986	Apr. 1986	July 1986
					Expansion					
All Manufacturing	49.2	49.7	52.7	51.4	50.9	49.5	45.6	39.4	42.9	42.7
Durable goods	49.0	51.6	58.8	59.0	60.2	52.4	50.3	45.9	41.8	40.5
Nondurable goods	49.4	48.1	47.6	43.9	42.6	47.1	42.0	33.6	43.9	44.6
					No Change					
All Manufacturing	48.2	46.1	44.8	46.9	42.3	47.3	49.1	55.4	51.0	51.8
Durable goods	45.6	39.2	36.4	37.8	32.9	41.5	40.8	45.7	47.7	50.8
Nondurable goods	50.3	51.9	51.9	56.0	50.7	52.1	55.5	64.2	54.2	52.8
					Reduction					
All Manufacturing	2.6	4.2	2.5	1.7	6.8	3.2	5.3	5.2	6.1	5.5
Durable goods	5.4	9.2	4.8	3.3	6.9	6.1	8.9	8.4	10.5	8.7
Nondurable goods	0.3	0.0	0.6	0.1	6.7	0.8	2.5	2.2	1.9	2.6

ATTENTION PC USERS: All data in this publication plus extensive government statistics are available on cost-effective diskettes. For more information, contact Linette Waters at (212) 759-0900.